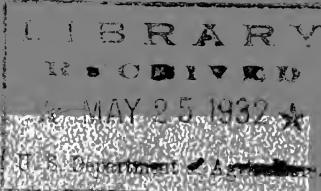


## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



62-23



1932

### To the Trade

**T**HIS edition of our General Catalog No. 12 cancels all previous issues. Owing to fluctuations in factory costs and changes of seed market, bulletins will be issued from time to time to promptly bring before the trade new goods of merit and also for the purpose of giving immediate advice of price changes.



## EVERYTHING FOR THE GOLF COURSE

**I**N PREPARING this booklet of golf course accessories and supplies, we have endeavored to deal with the various subjects in an advisory as well as a merchandising capacity. Service and suggestion to golf club officials in connection with the upkeep of their courses are available here in the fullest measure. We pride ourselves on being able not only to supply you with the proper grass seeds, fertilizers and equipment, but to advise you correctly concerning those best suited for your particular needs. Our Golf Department will aid in solving your problems.

To this policy of thorough co-operation, we attribute our continued growth throughout a quarter of a century of such service. The arrival of the 1932 Spring Seeding Season finds us, as usual, ready to ship the necessary grass seeds, fertilizers and equipment for your course direct from stock. We cannot at this time list all the accessories we carry. If you require anything not listed ask us for prices.

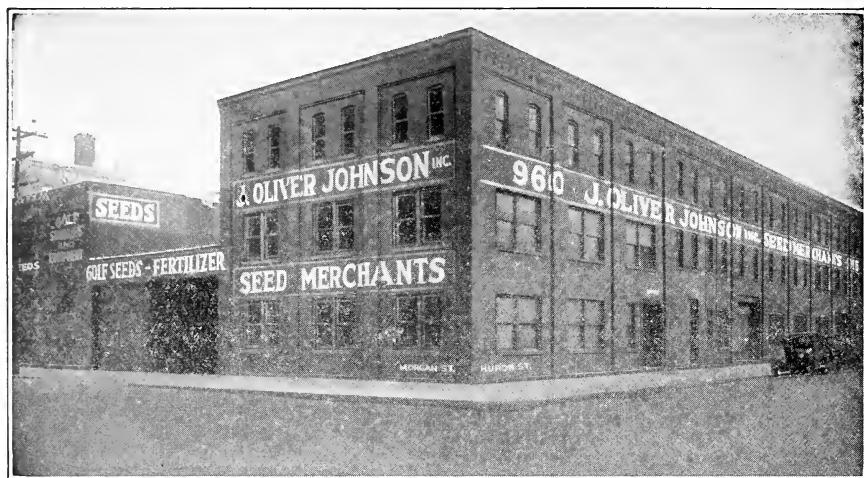
**J. OLIVER JOHNSON, Inc.**

Wholesale Seed Merchants

Morgan-Huron-Superior Sts.

CHICAGO, ILL.

Local and Long Distance 'Phone: Monroe 6580



## Demonstrations for Golf Club Officials at Our Show Rooms

FOR some years we have maintained very complete show rooms and demonstrating rooms in our main Chicago plant, which is illustrated above. Local or visiting Chairmen of Greens and Greenskeepers are invited to call at these show rooms whenever they wish and examine the complete line of golf course construction and maintenance equipment.

Golf club officials have found this service exceedingly valuable. As a rule, considerable time is spent studying catalog specifications—often without a final decision being made. A personal inspection of the materials and equipment not only will make the decision and the choice much easier but will result in final satisfaction.

During your visit we shall be glad to conduct you through the warehouse,

where you will see thousands of pounds of both domestic and imported varieties of grass seeds and numerous Golf accessories.

### How to Reach Our Main Plant

**By surface cars:** From loop take Milwaukee Ave. car to Morgan Street; or north and south-bound cars, transfer at Chicago Avenue, get off at Morgan, then one block south.

**By autos:** New Ogden Avenue Boulevard from north or south to Chicago Avenue, then east to Morgan.

Away from loop traffic—ample parking space.

From State and Madison Streets we are  $1\frac{1}{4}$  miles west and 1 mile north.

## Grass Culture

MANY conditions, differing in various localities, must be taken into consideration in the development of a satisfactory turf. Hence, it is almost impossible to give blanket advice covering each case as a whole. The general information we give, however, will be found to apply generally. Such factors as character of the

soil, fertilization required, regulation of moisture, weed growth and the use of quality seeds, obtain at all times. Proved and practical methods should always be followed, as satisfactory results never can be accomplished from slipshod work.

There is one rule which always applies in the purchase of seeds: It never

pays to select any but those of known quality. When you come to consider the labor, cost of planting and the additional expense of re-planting and extra attention if first results are not satisfactory, it will be found that the very best grade of seeds represents the most economical investment.

Our Service Department is at your command at all times to give personal assistance in solving your problems and to assist in the selection of proper seeds. If you wish, our representative will render written report of personal inspection. This service is gratis, and will be found a valuable source of accurate information for each individual case.

The producing of dense-growth putting-greens and fairways is not a matter of chance, but of close supervision of soil mixtures involving ideal capillary action, thus promoting resiliency of the turf, proper use of fertilizers, judicious use of tiling for sufficient drainage and immediate elimination of factors tending to later cause embarrassing delays.

In the selection of a site, such features as rolling land, hillsides and flat fields all contain different soil analysis. The loam conditions of each can be corrected by the use of sand, clay, humus and well-rotted horse manure mixed in proper proportions. This top-soil should be raked or fallowed until it is mellow.

Seeding of putting-greens will be found quite different from that of the fairway. The expense of preparing the green being greater, due to a limited area, than the fairway of given space, it is well to consider the seeding of the very best. Grasses for greens must be fine and dense, and

able to withstand constant wear and trodding. The selection of various grasses, such as Bent Stolons, Chewings Fescue, Red Fescue, Creeping and Rhode Island Bents is a matter of personal likes. The method of sowing is similar to that followed on fairways. Broadcasting will prevent the seed from forming ridges of grass which would divert the ball in its course. Do not be sparing in the use of seed, as a dense, even turf is desired in as short a time as possible. The use of seeders of the broadcasting type for fairways is always advisable, due to the uniform work performed.

MIORGANITE will do wonders for new turf. This fertilizer assists in quickly establishing dense, heavy turf on new fairway seedings. Unfertilized seedings on poor soil invariably fail or result in a thin, disappointing stand of grass, difficult to improve by subsequent fertilization or seeding. Even on good soil, a reasonable expenditure for fertilizer will hasten establishment of turf and enable earlier play. The cost of fertilizer, compared with the cost of seed and soil preparation, is so small that new seedings should always receive fertilizer prior to seeding. At this time, fertilizers can be easily worked into the surface soil by discing and harrowing. This insures an abundance of plant food in the soil layer occupied by the root system.

#### GREENSKEEPERS' EQUIPMENT

We have in our files at all times the names of a number of capable greenskeepers whose services are available. We shall be glad to assist anyone in need of such help by putting them in touch with these men.

### Characteristics of Grass Seeds

Variety	Purity of Good Seed	Average Germ Year Old	Average Length Vitality Years	Weight Seed Legal Bush	Weight Seed Actual Bush	Yield of Seed Acre	No. Seeds Average per Lb.
Bents.....	80	80	3	.....	17	.....	6,000,000
Bluegrass—Ken.....	75-85	75-85	1-2	14	14-28	200-350	2,400,000
Bluegrass—Can.....	75-85	75-85	1-2	14	20-24	200-500	2,400,000
Clover—White.....	98	80	10	60	60-63	200-300	700,000
Fescue—Chew.....	95	80	1	.....	22-25	400-500	700,000
Fescue—Red.....	95	80	1	.....	19-23	200-300	500,000
Fescue—Sheps.....	93	80	1-2	.....	22-25	200-300	700,000
Fescue—Meadow.....	90	93	2	.....	20-30	200-300	350,000
Red Top.....	95-98	93	6	14	12-42	200-300	4,135,900
Rye Grass—Per.....	98	90	2	.....	21-34	250-500	336,000
Rye Grass—Ital.....	98	80	2	20	21-28	500	285,000

## Johnson's Golf Mixtures

### JOHNSON'S FAIR GREEN

A combination of the best heavy weight domestic and imported grasses. The cream of the crop. Desired and recommended by many of the best clubs. Experienced greenskeepers claim this is the best mixture they have used.

### JOHNSON'S PUTTING GREEN

Absolute satisfaction has followed the use of this well known mixture. Producing a dense growth of deep-rooted varieties, forming an excellent putting green. Will "crown" well without loss of vitality.

### CALUMET FAIR GREEN

This excellent combination will produce results on your fairway. A domestic mixture selected for purity, showing the highest possible germination.

### FOREST PRESERVE FAIR GREEN

Well known and used by exacting clubs that demand the best. This mixture, consistent with cost, is an excellent producer.

### SPECIAL FAIR GREEN

A moderate priced quick producing mixture, especially adapted for initial seedings, where a solid, compact turf is desired for early season play.

### CHOICE FAIR GREEN

A very quick producer, where initial turf is desired in hilly spots subject to erosion.

## Johnson's Recleaned Grasses

Grass seeds selected for quality and representative of a standard by which buyers should gauge their purchases. Seeds of Dependable Germination and Absolute Purity.

### KENTUCKY BLUE GRASS (*Poa pratensis*)

Most noted grass in America. Native of the Old World, having been early introduced by the early colonists. Seed is harvested mainly in Kentucky, but more or less in Missouri and Iowa also. Seed of highest germination must be dried carefully and then cured during the winter. The grass has creeping underground stems each bearing a tuft of leaves at the tip.

### WHITE CLOVER (*Trifolium repens*)

Used to a great extent in lawn mixtures. Grows well on poor soil, forming a close, dense mat, and will withstand close clipping. A real soil builder. Weight, 60 lbs. to bushel.

### ITALIAN RYE (*Lolium multiflorum*)

Annual or short-lived perennial, distinguishable in the turf form from Perennial Rye Grass only by the blade being convolute in the bud. Grows well in any soil. Weight, 24 lbs. to bushel.

### RED FESCUE (*Festuca Rubra*)

Leaves are bright green; does not grow tufts but creeps by underground stems. Only two varieties are used in golf courses—RED FESCUE from Europe and CHEWING'S FESCUE, native of New Zealand. Withstands more shade and account of fine quality of turf, particularly adapts itself to sandy soil.

### SHEEP'S FESCUE (*Festuca Ovina*)

Thrives well in sandy, shallow soils. Weight, 20 lbs. to bushel.

### MEADOW FESCUE (*Festuca elatior*)

Slightly coarser than most grasses. Very durable. Better known as English Blue Grass. Weight, 24 lbs. to bushel.

### CREEPING BENT (*Agrostis Stolonifera*)

South German—an invaluable grass for golf greens; long creeping stems and roots, producing a very durable turf that will withstand severe usage. Weight, 20 lbs. to bushel.

### CRESTED DOG'S TAIL (*Cynosurus Cristatus*)

Very good in mixtures, forming a clear, dense growth and producing a tough turf of attractive color. Thrives best in Northwestern States. Weight 23 lbs. to bushel.

### RED TOP (*Agrostis Alba*)

It is a perennial, with creeping habit. Makes a medium loose turf. Grows under a great variety

of conditions. Best wetland grass among "tame" species. Grows on soil very poor in lime. Strongly drought resistant; used for holding banks to prevent erosion. Chief uses: 1. Sour grass. 2. Lawns under humid conditions—soil other than limestone. 3. Soil binder.

### CANADA BLUE GRASS (*Poa Compressa*)

Useful in extreme Northern States. Very hardy, and will withstand droughts. Weight 24 lbs. to bushel.

### PERENNIAL RYE GRASS (*Lolium perenne*)

Short lived perennial. Seed bed should be prepared as for other grasses. A fine mellow surface on compact subsoil gives best results. Does especially well when seeded in autumn. Its ability to grow rapidly allows plants to become well established before freezing occurs. Much coarser than other varieties.

### CHEWING FESCUE, NEW ZEALAND (*Festuca Chewings*)

Considered one of the best grasses for shad places. Produces a mass of fine root leaves; branches being extra-vaginal, plant will spread, making a solid, compact turf. Adapts itself to poor soil. Weight, 24 lbs. to bushel.

### HARD FESCUE (*Festuca Duriuscula*)

Will resist drought and stand hard usage. Should not be sown alone, due to its tendency to stool. Weight, 20 lbs. to bushel.

### BERMUDA GRASS (*Cynodon Dactylon*)

A Southern grass that thrives well in hot climatic conditions, south of Virginia. Weight, 37 lbs. to bushel.

### RHODE ISLAND BENT (*Agrostis Vulgaris*)

Domestic seed known as above. Also as Colonial bent; native of New Zealand and much purer. Thrives well in New England, and New York and is not uncommon south of Virginia and Missouri and west of the Rockies. Unlike other grasses it thrives well on acid soil.

### SEASIDE BENT (*Agrostis Maritima*)

A high grade bent seed grown on the Pacific Coast and sold under various trade names. Does very well all over the northern half of the U. S. and forms a close uniform turf of fine texture and color.

**Johnson's Quality Fertilizers**

Prices subject to market fluctuations. Write for prices f. o. b. your station.

Acid Phosphate 20%.	Leaf Mold.
Adco Bacterial Food.	Lime, Hydrated.
Agricultural Gypsum.	Limestone (Pulverized.)
Ammonium Phosphate—20/20.	Loma Plant Food.
Ashes, Hardwood.	Milorganite—Activat.d Sludge.
Blood, Dried.	Nitrate of Soda.
Blood and Bone.	Nitrophoska—15-30-15.
Blood, Bone and Potash.	Potash Salts.
Bonemeal, Standard.	Sacco Plant Food—4-12-4.
Bonemeal, Rosegrowers.	Scotch Soot.
Carnation Mixture—5-8-7.	Sheep Manure (pulverized.)
Cattle Manure (Pulverized)	Sphagnum Moss.
Cattle Manure (Shredded.)	Spomo.
Charcoal (Specify size.)	Sulphate of Ammonia.
Cotton Seed Meal—41-43%.	Sulphate of Iron.
Fertiluvia.	Superphosphate.
Floranid—See Urea.	Tobacco Dust.
Golf Special—12-6-4.	Tobacco Stems.
Horn Shavings.	Tree Food Special—10-8-6.
Humus.	Turf Special—10-8-6.
Kainit—See Potash Salts.	Urea—46%.
Koppers Velvet Lawn.	Vex.
Lawn and Garden—5-8-6.	Wonder Growth.

SHIPMENT FROM NEAREST WAREHOUSE STOCK.

**Fungicide—Insecticide—Exterminators**

Ant Olio.	Electric Worm Eradicator.
Antrol.	Herbicide.
Arsenate of Lead.	MacGregor's Ant Food.
Atlacide.	Mowrah Meal.
Bordeaux Mixture.	Nu-Green.
Calo-Clor.	Paris Green.
Calogreen.	Purfeck Chickweed Killer.
Calomel.	Semesan.
Corrosive Sublimate.	Snarol.
Cubor.	Sunoco Spray Oil.
Cyanogas.	Taboo Red Cap Equipment.
Dolco Diworma.	Tobacco Dust.
Dolge Weed Killer.	Volek.

The following pages describe more fully many of the above items. Due to market fluctuations prices on others are not shown. Lowest quotations upon request.



Milorganite appeals to the greenkeeper because it imparts a deep green color to the turf, promotes long continued vegetative growth, and does not burn or injure the turf.

Furthermore, due to its dry granular mechanical condition Milorganite is easily applied to greens and fairways.

Milorganite sustains long continued growth on old turf, and quickly produces dense turf on new grass seedings, is free from objectionable odors, harmful bacteria and weed seeds of all kinds.

Milorganite contains more than 6½ per cent organic nitrogen (equivalent to ammonia) and 2½ per cent phosphoric acid.

Application 30-40 lbs. per 1,000 sq. ft.  
Car lots, per ton f.o.b. Milwaukee \$20.00  
Ton lots, per ton, f.o.b. Chicago..... 29.00

### Urea

Urea is the purest and richest nitrogen plant food on the market. Contains 46% ammonia. Use only 1/3 as much as other fertilizers.

F. o. b. Chicago.  
Bag lots, per cwt..... \$ 8.00  
½ ton lots, per ton..... 150.00  
Ton lots, per ton..... 135.00

### Kopper's Sulphate of Ammonia

KOPPERS is an extra dry, finely granulated material packed in 100 lb. paper lined bags, insuring a good mechanical condition at all times.

**Price:** Due to market fluctuations price quoted on request.

### Armour's 10-8-6

Armour's Special Turf Fertilizer is a complete fertilizer, high in nitrogen, but also containing available phosphoric acid and potash, essential to the growth of sturdy, disease resistant turf.

Ton lots, f. o. b. Chicago, per ton....\$64.25  
Bag lots, per ton..... 80.00

A balanced fertilizer analyzing 5-10-4 and containing all of the plant foods necessary for a strong healthy turf.

Ton lots, freight allowed.....\$65.50

### Tobacco Dust

Tobacco is high in potash and its nicotine content discourages ants, worms, etc., and kills soft bodied insects by contact.

Per ton, f. o. b. Chicago.....\$50.00

### Ammo-Phos.

Ammo-Phos contains 20% of ammonia, practically all soluble and ready available, and 20% of available phosphoric acid.

½ ton lots, per ton.....\$75.00  
Ton lots, per ton..... 58.50

### Swift's Complete 12-6-4

Contains the elements necessary for finest turf growth. Balanced grass seed with balanced fertilizer has greater resistance under adverse conditions.

Ton lots, per ton, f. o. b. Chicago....\$70.00  
5 ton lots, freight paid Chicago district, per ton..... 65.00

### Charcoal

Charcoal is becoming more generally used each year. It sweetens the soil besides conserving moisture. About 300 lbs. per green is an average application.

Price, per ton.....\$50.00

**ADCO****HASTENS DECOMPOSITION**

A new process powder which when mixed with leaves, weeds, straw or vegetable matter converts this refuse into finest clean artificial manure for fertilizer. Inexpensive; 150 lbs. of **ADCO** will produce 3 tons of ready to use material. Spread material about foot deep, sprinkle with **ADCO**, stir well, then wet good. Layer upon layer treated as above may be used in 6 months. Why waste good fertilizer by burning. A compost pile of leaves 10'x10' piled 5 feet deep makes 3 tons of finished material.

4-25 lb. bags ADCO.....	\$ 9.00
100 lb. bags ADCO.....	8.00
150 lb. bags ADCO.....	10.50

Stocked various locations—write for delivered prices.

**Fertiluvia**

Finest quality leaf mold or peat humus from Upper Michigan peninsula peat bogs. Air dried, shredded decomposed vegetable matter, free from weed seeds. Promotes bacterial life, aerates soil, renders clay soils lighter, and sandy soils more compact. Low moisture content, possess great absorptive power. Packed in moisture resistant bags.

1 to 5 bgs, per bag.....	\$ 2.00
6 to 9 bgs., per bag.....	1.75
10 to 19 bags, per bag.....	1.50
Single ton lots, per ton.....	25.00
2 to 5 ton lots, per ton .....	23.50
6 to 10 ton lots, per ton.....	20.00

Carlots and delivered prices upon request.

**ANTROL SYRUP**

The Antrol Syrup attracts the worker ants. They feed on it, and its mild poison is so timed that it allows them to carry it back to the nest for food. It is transmitted to the queen and the entire nest. The whole colony is quickly destroyed.

Antrol Syrup is but mildly poisonous. It is not left exposed like powders or pastes, and is safest to use around children and pets, where "deadly" poisons would not be advisable.

The Antrol System is packed in handy cartons of four patented glass containers, and one 4-ounce bottle of syrup.

Price, per set.....	\$ .75
Additional Antrol in cases of 24/4 oz. 7.20	
12/1 pts..... \$7.60	6/1 gal..... 15.00

**PEAT MOSS****HORTICULTURAL—IMPORTED**

Superior quality horticultural peat, partly decayed vegetable matter high in organic humus. Capable of holding 15 times its weight in water. An efficient soil conditioner for poor soil, prevents washing on terraces. Odorless and free from weed seeds. Use **JOHNSON'S SUPERIOR IMPORTED PEAT MOSS** on new or old lawns. Unequalled for flower beds, rose bushes, shrubs, evergreens, potted plants, bulbs, peonies, and other flowers, make remarkable growth where peat moss has been used. 20 bushels of finest peat pressed into each compact bale.

1 to 4 bale lots per bale.....	\$2.90
5 to 9 bale lots, per bale.....	2.80
10 to 24 bale lots, per bale.....	2.70

Car lot prices upon request.

**SPOMO PEAT**

A domestic peat of high value furnishing finest organic matter for compost piles, excellent medium for germinating seeds, starting cuttings, growing evergreens and propagating orchids. Has great absorptive and moisture retaining power. Watering reduced to minimum follows use of **SPOMO PEAT**. Bales approximately 150 lbs. each.

1 to 5 bales, each.....	\$3.00
6 to 10 bales, each.....	2.75
11 to 15 bales, each.....	2.50
16 to 20 bales, each.....	2.25
21 to car lot, each.....	2.00

Car lot prices on application.

**MacGREGOR'S ANT FOOD**

For exterminating Ants.

For several years MacGREGOR'S ANT FOOD has been used on the largest estates and golf courses in the United States with truly wonderful success. Proof of this statement can be had, testifying as to results obtained from the use of this ANT FOOD, from satisfied customers.

Prices: Half pound.....	\$0.50
Single pound.....	1.00



**ANT SIRUP**  
A HONEYDEW FOOD FOR CONTROLLING  
MANY SPECIES OF SWEET EATING ANTS

Ant Olio is a honeydew food that can be adapted for use on the golf greens, around the club house or wherever there is an ant infestation. On the green it may be injected into the ant holes with an ordinary clean oil can, or it may be placed in small metal cups on the edge of the greens, or in special trap nest. Ant Olio quickly destroys all species of sweet eating ants.

1-quart cans....\$2.00 1-gallon cans....\$5.00

### MOWRAH MEAL

A worm remover in powder form, easy to apply, acts as a fertilizer and its effects are lasting. Made from a nut imported from India. Apply at the rate of 15 pounds per 1,000 sq. ft. of green, and water in thoroughly. Has a fertilizer content of 3.36 ammonia and 1.71 potash.

Price, ton lots, per ton.....\$44.00  
Less than ton lots, per ton..... 50.00  
F. o. b. Chicago.

## SUNOCO SELF EMULSIFYING SPRAY

Emulsifies Instantly—Controls

San Jose	Terrapin	Spru. Gall
Oyster Shell	Cott. Maple	Aphids
Eur. Elm	Pine Leaf	Red Spider
	Var. Pests	

on on  
SHADE TREES EVERGREENS

Used successfully by principal forestry divisions of Park Boards, Tree Surgeons and Cemeteries on ornamental trees and shrubs. Circulars on request. Freight allowed to destinations east of Mississippi River on case or drum lots.

6-1 gal.....	\$ 7.50
2-5 gal.....	10.00
15 gal. drums.....	9.30
30 gal. drums.....	15.90
50 gal. drums.....	23.00

Freight allowed full case and drum lots.

## EVER GREEN

KILLS ANTS AND GARDEN INSECTS

Kills Plant Insects, Ants and Fleas.

Specially prepared with a standardized Pyrethrum content. Non-poisonous to man, birds and animals. Directions with each bottle. 3 oz. diluted in water make 6 gallons of spray.

6 oz. bottle.....	\$1.00
1 pt. bottle.....	2.00

### ATLACIDE

(Calcium Chlorate)

A non-poisonous weed killer in dry powder form. Ingredient is absorbed by the plant, killing roots as well as foliage.

3½ lb. cans, each.....	\$1.50
50 lb. drums, per lb.....	.14
100 lb. drums, per lb.....	.13½

### CHICKWEED KILLER



PURFECK chickweed eliminator will positively kill all chickweed without injury to the grass.

It is sprayed directly on the spots with a small sprayer. Best results by spraying in Spring and Fall. Elimination affected in 12 days. 1 gallon makes 3 of spray.

1 gallon.....	\$2.00	10 gallons.....	\$17.00
5 gallons.....	9.00	50 gallons.....	60.00

### CYANOGAS

(A powder for eliminating squirrels and rodents from golf courses and estates.)

A teaspoonful placed in the opening of a burrow and the opening closed will kill all gophers, squirrels and crayfish in that burrow. It is a sure cure.

PRICES	
5 pound tins .....	\$2.75
25 pound tins .....	9.25

## Worm Exterminators

### Dolco Diworma

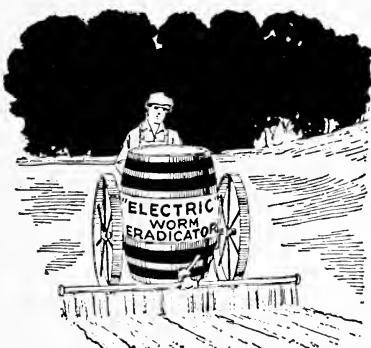


Drives out worms and then destroys them. Keep worms from tunneling and mounding your lawns and golf green. Dilute 1½ pints Dolco Diworma in 50 gallons of water, to make a most economical wormicide. Use the Johnson Sprinkling Cart to sprinkle worms away with Dolco Diworma.

5 gallon kegs, per gal.	\$3.15
10 gallon kegs, per gal.	3.00
15 gallon kegs, per gal.	2.90
30 gallon kegs, per gal.	2.80
50 gallon kegs, per gal.	2.75

F. o. b. Chicago.

### Electric Worm Eradicator



A liquid, positive in action, applied with a Johnson barrel cart or sprinkling can at the rate of 1½ pints in 50 gallons of water, covering 600 square feet. Two gallons required for the average green. Will not burn the grass.

5 gallon can, per gal.	\$3.15
10 gallon can, per gal.	3.00
15 gallon can, per gal.	2.90
30 gallon drum per gal.	2.80
50 gallon drum, per gal.	2.75

F. o. b. Chicago.

## Weed Eradicators

### Dolge Weed Killer



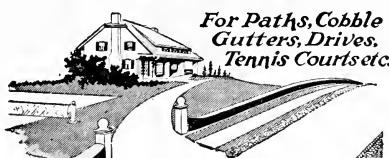
Penetrates to the roots of weeds, dandelions, mercury, poison ivy and other undesired growth—permanently destroying the plant.

1 gallon can.....	\$ 1.50
5 gallon keg.....	6.50
10 gallon keg.....	8.00
30 gallon drum.....	20.00
50 gallon drum.....	30.00
55 gallon drum.....	33.00

F. o. b. Chicago.

Freight allowed on 10 gallon containers and larger.

## “HERBICIDE” THE WEED EXTERMINATOR



When diluted 1 part to 40 parts of water, HERBICIDE destroys both the tops and ROOTS of undesirable vegetation. It is used to great advantage by golf clubs for keeping weed growth out of sand traps. It is also used extensively by cemeteries and parks for keeping driveways and paths free from weeds. HERBICIDE gets rid of weed growth without disturbing the surface of the ground and is therefore a great help for use on tennis courts. 1 gallon mixture covers 2 to 3 square yards.

1 gallon can.....	\$ 1.50
5 gallon can.....	6.50
10 gallon can.....	8.00
30 gallon drum.....	20.00
55 gallon drum.....	33.00

F. o. b. Chicago.

## Semesan for "Brown Patch" Control

The principal ingredient of Semesan is a complex organic substance, made from carbolic acid, chlorine and mercury, which is known scientifically as hydroxymercuri-chlorophenol or, more popularly, as chlorophenol mercury.

With this extremely effective chemical are compounded certain other substances that intensify its disinfecting properties and make it possible to apply Semesan by the quick convenient and non-laborious method of water solution treatments.

Semesan possesses highly selective toxic qualities, by virtue of which it is deadly poisonous to the lower forms of life, such as the "Brown Patch" fungi, yet at the same time harmless to the higher types of life to which the grasses and plants belong. In fact, authorities now recognize that its effect upon seeds and plants is stimulatory and in no way injurious, as is corrosive sublimate.

Unlike other disinfectants and fungicides, such as Bordeaux mixture, Semesan may be used as frequently as conditions demand without accumulating in the soil as a poison detrimental to the purpose for which it is employed.

1 lb. tin .....	\$ 2.75	100 lb. drum .....	\$200.00
5 lb. tin .....	13.00	300 lb. drum .....	585.00
25 lb. pail .....	51.25		



## Nu-Green Combination Disinfectant and Fertilizer

NU-GREEN is a combination of Brown Patch Disinfectant and a Fertilizer. No danger to grasses from improper mixture.



To prevent Brown Patch from putting in an appearance, once each ten days or two weeks, beginning prior to the Brown Patch season, apply a solution of one pound Nu-Green to 50 gallons of water. Use at the rate of 50 gallons of solution to 1,000 square feet of green area.

By using a power sprayer good results have been obtained by using 1 lb. Nu-Green in 50 gal. water to cover 2,500 square feet. A prevention application once a week.

As a cure if you have Brown Patch use one pound in 35 gallons of water and use at the rate of 50 gallons of the solution to 1,000 square feet.

5 lb. tin .....	\$ 9.00	100 lb. drum .....	\$130.00
25 lb. pail .....	33.75	300 lb. drum .....	375.00
F. o. b. Chicago.			

## Corrosive Sublimate

(Bichloride of Mercury)

Used by a large number of clubs as a worm eradicator and Brown Patch Remedy and is especially useful for the control of snow mould.

Do not use more than 3 oz. in 50 gal. of water to cover 1,000 square feet.

First mix 3 oz. with 3 oz. of either muriate of Ammonia or table salt and dissolve in one quart of warm water.

5 lb. boxes, per lb.....		Ask for price
25 lb. boxes, per lb.....		

50 lb. boxes, per lb.....

Lowest possible price at all times.



**Calomel**

Straight calomel is increasing in favor with many green-keepers as a Brown Patch preventative and cure. Calomel has a mercury base and not over 3 oz. in 50 gal. of water to cover 1,000 sq. feet of turf should be used.

5 lb. boxes, per lb.....  
25 lb. boxes, per lb..... } Ask for price  
50 lb. boxes, per lb..... }

**Calogreen**

Finely powdered calomel for the cure of small Brown Patch also gives a prolonged protection with no danger of burning the grass. Use 3 oz. in 50 gal. of water to cover 1,000 sq. ft.

5 lb. boxes, per lb.....  
25 lb. boxes, per lb..... } Ask for price  
50 lb. boxes, per lb..... }

**Arsenate of Lead**

Experiments over a period of six or seven years show no harmful reaction to turf.

Five pounds per 1000 square feet will eliminate Worms and Grubs, and show a decided check in Poa Annua, Chickweed, and Crab Grass.

Price, per 100 lbs..... \$13.00  
Ton lots, per 100 lbs..... 12.00

Due to fluctuations of market, prices are subject to change.

**Calo-Clor.**

Calomel with corrosive sublimate for the cure of both large and small Brown Patch and the eradication of earth worms. Cheaper to use, fewer applications. Use 3 oz. per 100 sq. ft. of green.

5 lb. boxes, per lb.....  
25 lb. boxes, per lb..... } Ask for price  
50 lb. boxes, per lb..... }

**Nursery Volck**

Control Scale, Red Spider, Aphis, Mealy Bugs and other pest on ornamental, shade, and coniferous trees. Kills eggs as well as young and adults by summer application. Can be combined with other sprays such as Arsenate of Lead, Nicotine, Bordeaux and other sprays excepting Sulphur Sprays.

Quarts-Packed 12 to carton, per qt...\$ 1.00  
Gallon-Packed 6 to carton, per gal... 3.00  
5 gallon can, per can..... 12.00  
15 gallon drum..... 25.00

F. o. b. Chicago.

**Taboo Red Cap Equipment**

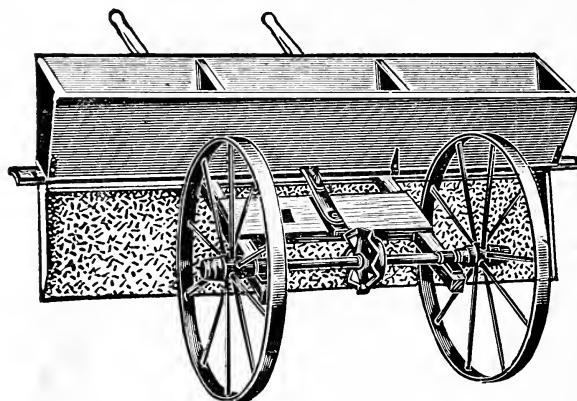
Eradicates Moles, Ground Squirrels, Gophers, Rats and Wood Chucks.

U.S. Gov. approved



Projector, each..... \$2.00  
Cartridge, per dozen..... 3.00

## Thompson Spreader

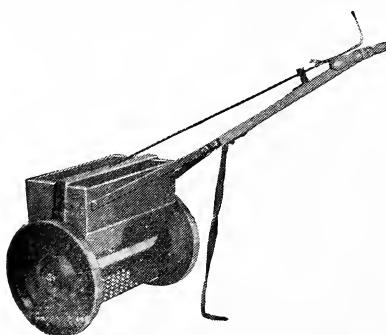


No. 110—Smaller than the No. 208 and intended for lighter work, especially for the application of chemicals such as Semesan, Arsenate of Lead, etc., with sand or other material as a carrier. Will hold 1½ bu. of fertilizer.

With scatter-board, 6 ft. spread, f. o. b. Chicago.....\$20.00

No. 615—Heavy galvanized metal hopper holds 6 cu. ft. Wheels 4 in. semi-convexed tires. New non-glogging forced feed mixes and breaks up material which cannot arch in hopper. Scatter Board 36 in. wide. Shipping weight 225 lbs.....\$75.00

## Johnson's Master Distributor



A new, perfected machine for even distribution of fertilizer, top dressing and grass seed. Has simple regulating device for sowing desired amount. Positive instantaneous shut-off control on handle. Non-corrosive moving parts. Perforated distributing plate. Rotary agitator insures free flowing material. Strongly constructed throughout.

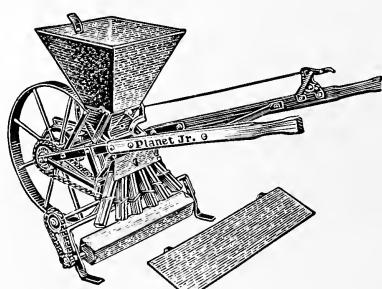
This machine recommended by leading agricultural colleges, fertilizer manufacturers and green keepers everywhere. Will last for years.

### NOTE:—

Single disc wheels—GMD-160 and 240  
Double disc wheels—GMD-241 and 361

Model	Width	Cap'y. lbs.	Price
GMD-160	16"	50	\$ 8.75
GMD-241	24"	75	12.25
GMD-240	24"	75	11.00
GMD-361	36"	110	15.50

## No. 235—Fertilizer Distributor



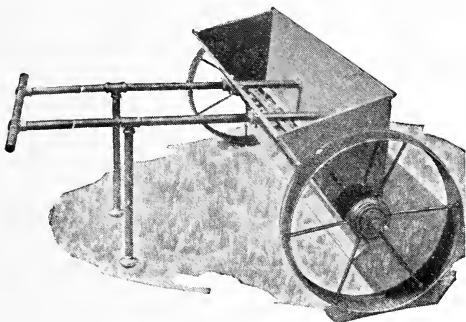
The No. 235 distributor is one of the best on the market, and will handle grass seed, Milorganite and all commercial fertilizers. Used extensively for spreading Arsenate of Lead with Milorganite. Hopper holds about 100 lbs. Tire is 4 inches wide. Machine is very accurate and spreads material evenly.

Price, f. o. b. Chicago.....\$35.00

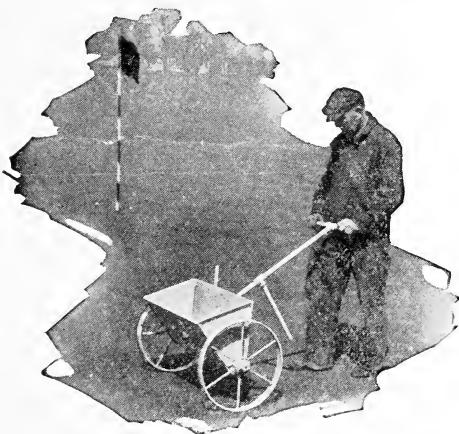
## Hoffman Spreaders

Standard Line All Purpose Distributors  
All Metal-Folproof-Time Tested  
Free Wheeling.

Can't be beat for distributing\* prepared plant food, lime, sand and all kinds of fertilizer on lawns and for dusting insecticides on garden plants and flowers. Unexcelled for salting grass infested walks with Atlacide, Calcium Chloride or salt and for sanding icy walks in winter.



**Hoffman Senior**—Spreads 53" swath.  
Balanced construction. Easy to operate. Quick, accurate adjustment.  $\frac{1}{4}$  lb. to 12 lbs. per 10 sq. yds.

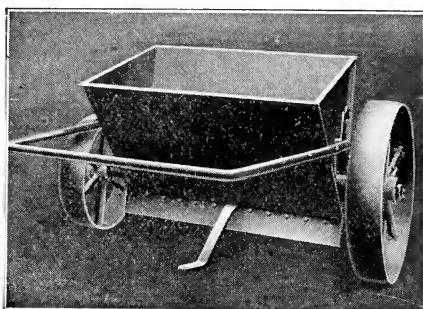


**Hoffman Standard**—Spreads 38" swath.  
**Hoffman Junior**—Spreads 27" swath.

GHD-Jr., 24"	\$15.00
GHD-Std., 36"	22.50
GHD-Sr., 48"	30.00

Freight allowed on actual weight.

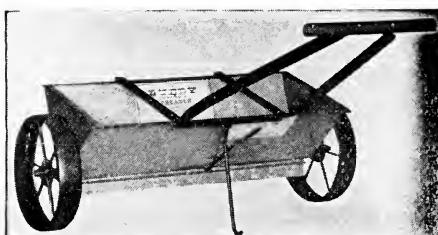
## Soilspreader Top Dresser



The new Soilspreader provides a better method for top dressing greens at a new low cost. It is simply constructed. Two large rolled edge wheels support the "V" Type Hopper of ample capacity. Clutches on each wheel prevent the discharge of material until wanted. Improved agitator at bottom of hopper provides for even distribution of material whether light or heavy feed is required. No ridges or rows—positive sifting into the grass.

Handles moist or dry material—light and easily moved—thoroughly tested and approved. A time and labor saver for the greenkeeper or gardener.  
Model H. Soilspreader complete....\$90.00  
F. o. b. Chicago.

## Salem Distributor



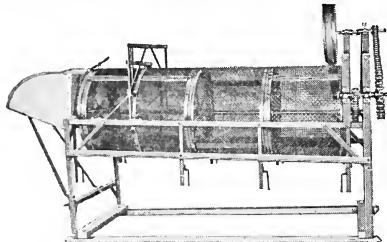
Salem 24" and 30" sizes.

Salem "Twenty-four" and "Thirty" are ideal for large open spaces. For double duty where space permits, holds twice the amount of material.

GSD-24"	\$10.00
GSD-30"	15.00

Freight allowed on actual weight.

## Converse Rotary Soil Screener



For screening compost to top dress Putting Greens and preparing soil for fine fairways and lawns; also for screening sand and gravel.

Consists of a revolving screen cylinder in three sections, which are easily changed. Screens are strongly made of heavy woven wire and mounted on strong steel frames which are so well balanced that very little power is required to operate.

Made in several different models for hand or motor power. Capacity five cubic yards per hour of dry material.

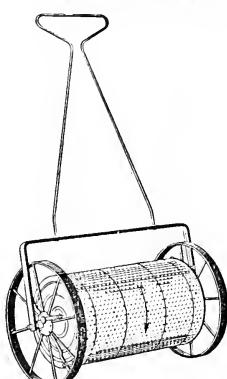
Screen diameter—30 inches. One section 36 inches and two 24 inches long. Can be had in any size mesh. Standard equipment  $\frac{1}{4}$ ",  $\frac{3}{8}$ " and  $\frac{1}{2}$ ".

GRS-1—Direct power drive.....\$185.00  
 GRS-2—Geared power drive..... 210.00  
 GRS-3—Geared drive  
 motor attached ..... 330.00

F. o. b. Factory.

Always specify speed of your power unit and diameter of its driving pulley when ordering.

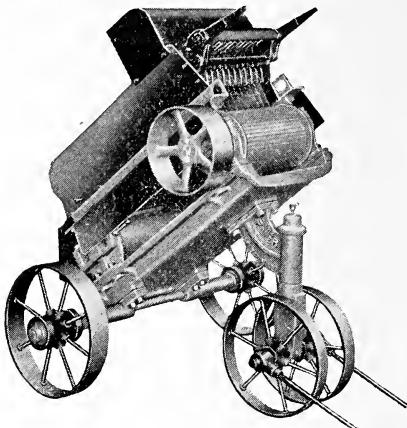
## Hawkes Ferti-Spreader



Distributes fertilizers evenly in any quantity desired, has simple set adjustment. Plate hinged to open entire end for filling as easily as open top machines. An excellent machine for operation on small lawns.

GHF-35 lb. capacity.....\$8.50  
 Freight allowed on actual weight.

## Royer Compost Mixer



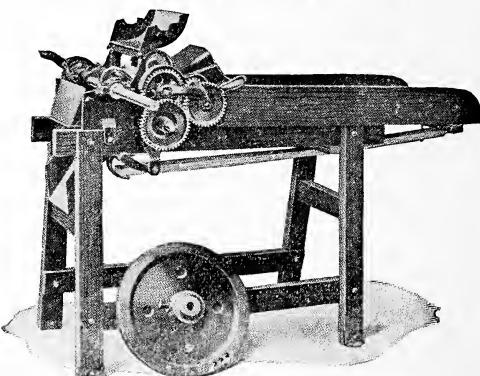
The Royer compost mixers are used on the best golf courses; in one operation, the machine mixes, screens and loads finished compost. A great labor saver. The Model M shown here is the one for the average golf course, easily operated by the tractor; the Model O, is the model M mounted with a 2 cylinder 6 h. p. gasoline engine.

Model M Royer Mixer.....\$580.00  
 Model O Royer Mixer, with engine..... 980.00

For those that want a smaller mixer, there is the Model K, which is just a little smaller than the Model M, shown, and only has two wheels in front and can be handled like a barrow. The model H is the Model K mounted on wheels with a single cylinder 1 $\frac{1}{4}$  h. p. gasoline engine.

Model K Royer Mixer.....\$390.00  
 Model H Royer Mixer, with engine..... 610.00  
 F. o. b. factory.

## Johnson Bent Stolon Cutter

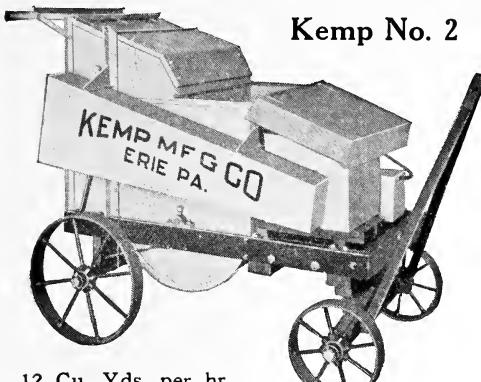


We recommend this machine for cutting up Bent Stolons or Bermudas. Can be used by hand or with light power. The 10-inch diameter, 4-inch face pulley is furnished when ordered, at extra charge.

Frame is built of hardwood with mortised joints and is well braced. When used as a power cutter it requires 1 horsepower, speed of cylinder about 300 R. P. M. Weight, 280 lbs.  
 No. 10—Hand power only, 2-10 $\frac{1}{2}$ " knives....\$30.00  
 No. 10-P—With pulley for power..... 33.00  
 No. 10 $\frac{1}{2}$ —Power only, 3-10 $\frac{1}{2}$ " knives..... 35.00  
 Factory shipment.

## Kemp Power Soil Shredders

### Kemp No. 2



12 Cu. Yds. per hr.

The "KEMP LINE" offers the most complete array of soil preparation equipment—A KEMP for every need (3 sizes.) Pay for your KEMP the first year by saving labor costs. Select the size that fits your need and produce compost of the finest quality. Note the saving in labor cost. Hand-turning a pile from 2 to 4 times is not only costly but never produces material equal to KEMP preparation. A KEMP with a double screener will mix, shred and not only remove sticks, stones and other refuse but produce top dressing, bedding and potting material for immediate use, properly aerated and moisture free. Operated by gasoline engine or electric motor.

Power—3 H. P. Engine or Motor.

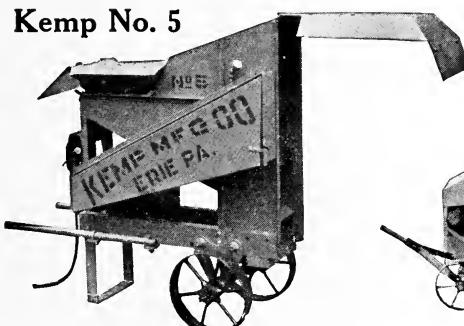
### SPECIFICATIONS:

Gas Engine	Elec. Motor
Length	5' 0"
Width	5' 4"
Height at discharge	4' 9"
Height at hopper	3' 5"
Weight	1250 lbs.
Shipping wgt.	1400 lbs.
	800 lbs.
	900 lbs.

Price without screener.....\$400.00  
 Price with single screener.....465.00  
 Price with double screener.....475.00

F. o. b. Pennsylvania factory. Available from Chicago stocks plus factory to Chicago freight.

### Kemp No. 5



3 Cu. Yds. per hr.

A one man machine for use between benches in greenhouses. Electric only.

### SPECIFICATIONS:

Length with handles	4' 2 1/2"
Length less handles	3' 1"
Width only	2' 1"
Height at discharge	4' 3"
Height at hopper	3' 5"
Weight	400 lbs.
Shipping weight	425 lbs.
Power	1 H. P.

Price f. o. b. factory.....\$190.00  
 is shipped from Chicago Stock plus  
 freight factory to Chicago.

**IMPORTANT**—When ordering any size with motor please state AC or DC current cycle, phase, voltage, etc. Repair parts seldom needed but always available at our Chicago Warehouse.

### Kemp No. 1



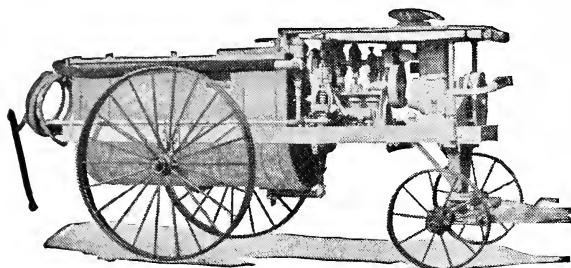
6 Cu. Yds. per hr.

### SPECIFICATIONS:

Gas Engine	Elec. Motor
Length	6' 0"
Width	2' 3"
Height at discharge	4' 5"
Height at hopper	3' 5"
Weight	750 lbs.
Shipping weight	900 lbs.
Power	2 H. P.
Price without screener.....	\$260.00
Price with single screener.....	325.00
Price with double screener.....	335.00

F. o. b. Penna. factory. Available from Chicago stock with factory to Chicago freight added.

## Golf Course Spray Outfit



The BEAN is one of the oldest and best spray outfits made. Especially adapted for golf course work. Double tanks, wide wheels, tractor hitch, etc., comes in a variety of sizes and capacities from 100 gal. up, at prices as low as \$300.00. Built to handle fertilizers, fungicides, etc.

Write for special catalogue.

## Johnson Sprinkling Cart

For applying Ammo-Phos, Semesan, Sulphate of Ammonia, worm eradicators, etc., in liquid form. More economical as to labor and fertilizers than the ordinary watering can. Flow and shut-off rod from rear.

### SPECIFICATIONS

Barrel, Wood, 50 gallons—Painted green and white.

Chassis, Steel construction.

Wheels, Steel, 36 in. high.

Tires, 4 in. wide flat.

Boom, 7 ft. wide—holes drilled 1 inch apart.

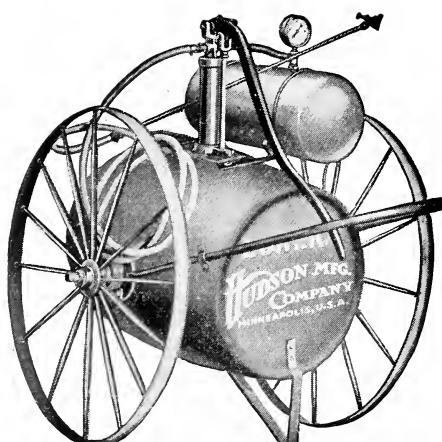
Valve, Brass—can be adjusted by operator from rear.

**GSC-1**—Price, f. o. b. Chicago..... \$30 00

Shipping weight, 197 lbs.



## Eureka Sprayer



The Eureka is intended for golf courses that want a good practical outfit at a reasonable price. It is built for hard service. Develops a working pressure of 200 pounds and is equipped with a large air pressure tank, to maintain a high pressure and steady discharge. It can be used on bent greens, in orchards, flower gardens, shrubbery, vineyards, gardens, stock barns, cattle pens, hen houses or for white-washing, cold-water painting, disinfectants, etc. It is made in the hand drawn style as shown.

**Pump**—Our regular No. 4 is used, mounted on side of barrel.

**Tank**—50 gallon welded steel barrel. This avoids the common trouble experienced with wood barrel of drying and warping when not in use so that it is impossible to make it tight again.

**Pressure Tank**—Boiler steel with welded seams; tested under a pressure of 275 pounds. Fitted with pressure gauge reading to 200 pounds.

**Wheel**—30 inches diameter, 2 inch tire. Fastened to tank with heavy bolts.

**Frame**—Steel tubing, handle of same material.

**Discharge Equipment**—4 ft. of  $\frac{1}{2}$  in. spray hose, a 4 ft. iron pipe extension, angle Ideal spray nozzle and leakless shut-off valve.

**Shipping Weight**—Securely crated, No. 22, 235 lbs.

**GES-No. 22**—Hand drawn as shown. Price \$50 00



## High Pressure Tank Sprayer

This sprayer, unexcelled for spraying Brown Patch spots, may be carried over shoulder and spots sprayed with Nu-Green early in the morning. Drives the fungicide to the grass roots under high pressure.

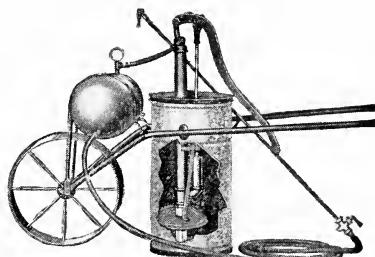
4 gallon Brass or Galvanized tank with 27" Hose and 18" extension pipe with nozzle.

**GTS1**—Galv. Tank—Each..... \$5.00  
**GTS2**—Brass Tank—Each..... 7.25

## Hudson Ideal Sprayer

Equipped with a reserve air pressure tank and gauge, maintains an even high pressure with minimum effort. Easily wheeled from one green to another. Capacity 15 gal. material. Pressure tank tested to 275 pounds, gauge reading to 200 pounds. Wheel 18" with 2½" tread. Equipped with 6 feet of ¾" spray hose and 4 foot ¼" iron pipe extension. Ideal nozzle and leakless shut-off.

**G33S**—Galvanized tank..... \$35.00  
**G33BS**—Brass tank..... 44.00



## Self-Closing Waste Receptacles

Order by Catalog Numbers—Always Specify Finish

### PRICE LIST



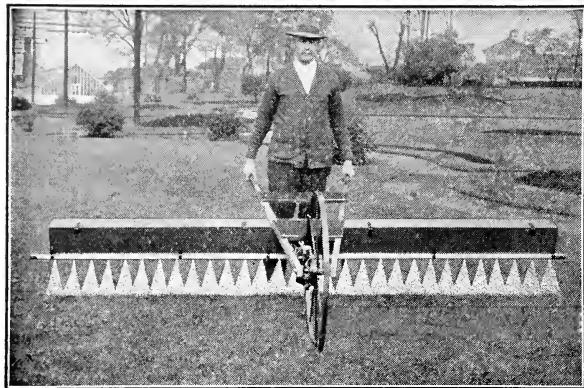
Cat. No.	Size of Base	Height Overall	Approx. Shipping Weight	Capacity in Gallons	Grey or Green	White Enamel	Grained Mahogany
5	9" x 9"	18 5/8"	12 lbs.	4 1/2	\$5.50	\$5.95	\$7.75
10	11 1/2" x 11 1/2"	24 3/4"	19 lbs.	9 2-5	6.50	7.00	9.25
15	11 1/2" x 11 1/2"	41"	35 lbs.	23	9.25	10.00	13.00
30	16" x 16"	34 3/4"	45 lbs.	27	10.00	11.50	14.50
50	21" x 21"	47"	83 lbs.	65	18.50	20.50	24.00
60	21" x 21"	48 1/4"	112 lbs.	65	22.00	Green Only	
60A	Same as No. 60 but with Advertising Sign Frames				25.75	Green Only	

### Standard Equipment

No. 5 equipped with paper bag, 25 furnished with each Receptacle.  
 No. 10 equipped with paper bag, 25 furnished with each Receptacle.  
 No. 15 equipped with a removable galvanized can.  
 No. 30 equipped with burlap bag, 1 furnished with each Receptacle.  
 No. 50 equipped with burlap bag, 1 furnished with each Receptacle.  
 No. 60 equipped with burlap bag, 1 furnished with each Receptacle.

## Thompson's Wheelbarrow Seeders

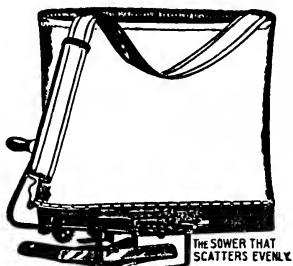
THIS SEEDER PARTICULARLY ADAPTED FOR SEEDING  
GOLF GROUNDS, CEMETERIES AND PARKS.



The No. 105—10-foot Thompson Grass Seeder illustrated is for sowing all solid or re-cleaned seeds, such as Red Top, Orchard Grass, Clean Blue Grass, Rye Grass or any other seeds of the same size or nature in any quantity per acre desired.

Price ..... \$20.00

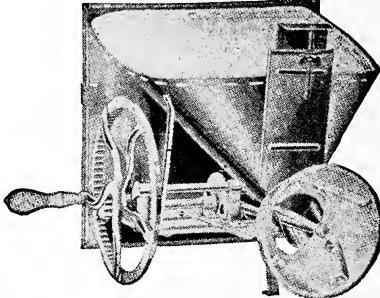
### Seed Sower



A sower that gives an even distribution of seed. A favorite among low-priced seed sowers.

GCS-1—Single Fan ..... \$1.55  
GCS-2—Double Fan ..... 2.05

### Broadcast Seeder



Will sow any kind of grass seed at rate of four to eight acres per hour. Seed is scattered from 8 to 20 feet on each side.

GHS-1—Each ..... \$3.65

### Lamot Soil Testing Sets



KENNY SET will determine whether your soil is acid or alkaline, and the degree. Very simple and tests can be made in a few minutes. Charts with the set indicate the soil preference for all common plants, shrubs and grasses.

GKT ..... \$5.00

THE MORGAN SET is a little larger and more complete and allows a greater latitude of experimental work.

GKT2 ..... \$10.00



### Tractor Wheel Spikes

Staude spike Hex shoulder $\frac{3}{4}'' \times 1\frac{1}{4}''$ with $\frac{5}{8}''$ thread, each.....	\$0.20
Fordson spikes $\frac{5}{8}'' \times 1''$ with $\frac{3}{8}''$ thread, each.....	.10 $\frac{1}{2}$
Horner spikes round shoulder $\frac{3}{4}'' \times 1\frac{3}{8}''$ with $\frac{1}{2}''$ thread, each	.09
Horner spikes square shoulder $\frac{3}{4}'' \times 1\frac{3}{8}''$ with $\frac{5}{8}''$ thread, each	.14

### Diamond Steel Center Spikes

These spikes have a hardened steel center. The outside of the spikes wear away first, leaving the spike always properly pointed.

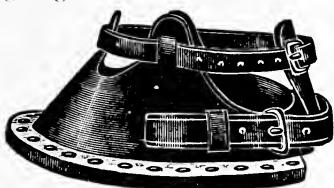
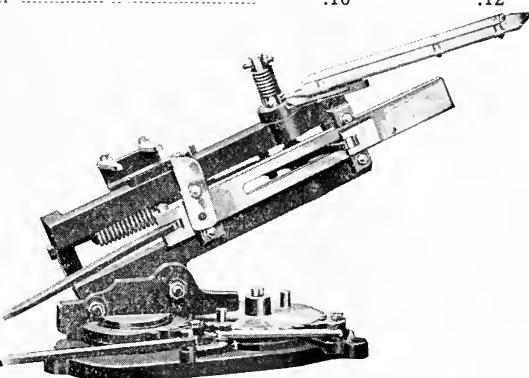
Diamond Spikes Square Shoulder—	Without Steel Center	With Steel Center
$\frac{3}{8}''$ thread, each .....	\$0.07	\$0.09
$\frac{1}{2}''$ thread, each .....	.08	.10
$\frac{5}{8}''$ thread, each .....	.10	.12

### Black Diamond Traps

**AUTO ANGLE.** Automatically changes angles, easily set for single or doubles, positive in action. Price, each..... \$90.00

**SIMPLEX.** Same high quality as the Auto, only has not the Auto Angle feature. Price, each..... \$55.00

**TARGETS.** Per bbl. (594) \$3.65



### Horse Lawn Boots

#### For Use on Golf Links, Tennis Courts and Fine Lawns.

The sole is hardened, filled with steel rivets and made waterproof. The construction is entirely with rivets—no stitching whatever. Fastened to the horse's foot, not to the ankle, giving free action and no chafing.

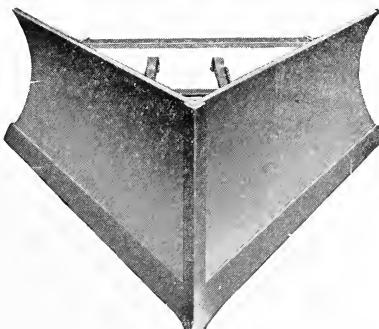
No. 2 boot measures inside (extreme width) $5\frac{1}{2}$ in.
Correct size for No. 2 horseshoe.
No. 4 boot measures inside (extreme width) $6\frac{1}{2}$ in.
Correct size for No. 4 horseshoe.
No. 6 boot measures inside (extreme width) 7 in.
Correct size for No. 6 horseshoe.
No. 4 size generally used. Larger sizes to order.
Per set of four..... \$16.00

### The Meyer Auto Snow Plow

This plow may be attached to any automobile or tractor having an 'I' beam axle. Can be attached or detached in 2 minutes time. Made of steel with blade 24" high. This plow divides and rolls the snow clearing a path well beyond the car wheels with surprising little resistance.

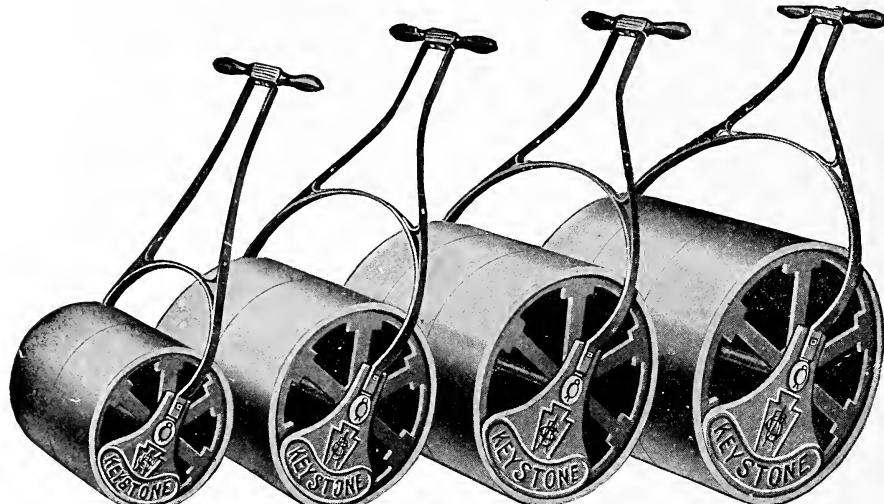
We also carry the Meyer Auto Snow Shovel for clearing parking places, and skating rinks.

**GSP—Snowplow** ..... \$97.50



## Cast Lawn Rollers

FOR LAWNS, PARKS, DRIVES, GOLF GROUNDS.

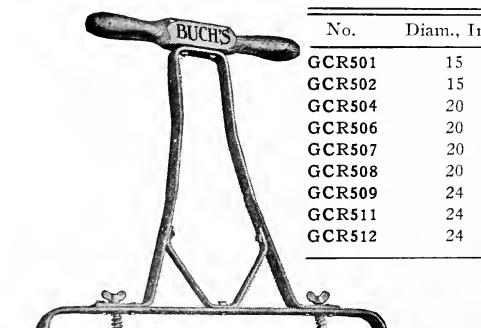


**Drums**—Cast five-spoke wheels with ground smooth face and fine finish.

**Bearings**—Steel roller bearings mechanically constructed and run so easy a child can operate.

**Handles**—Steel with wood hand hold and all firmly braced and neatly finished. Rounde edge will not tear up the lawn.

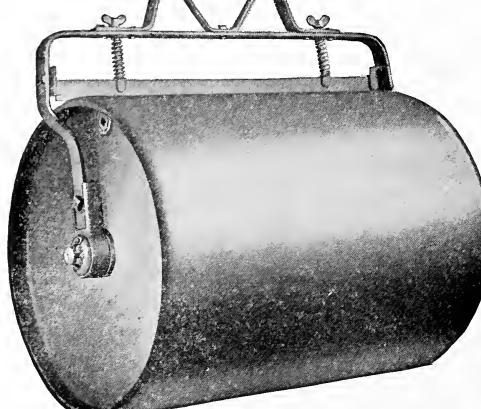
No.	Diam., In.	Lgth., In.	Sections	Face, In.	Wgt., Lbs.	Price
GCR501	15	15	2	7½	175	\$20.00
GCR502	15	22	3	7½	250	24.00
GCR504	20	20	2	10	250	26 00
GCR506	20	24	3	8	300	33.00
GCR507	20	24	2	12	300	32.00
GCR508	20	30	3	10	350	38.00
GCR509	24	20	2	10	400	42.00
GCR511	24	24	3	8	450	46.00
GCR512	24	30	3	10	500	52.00



## Water Ballast Lawn Rollers

Adapted for Rolling Lawns, Golf Courses, and Tennis Court Scraper to keep surface clean.

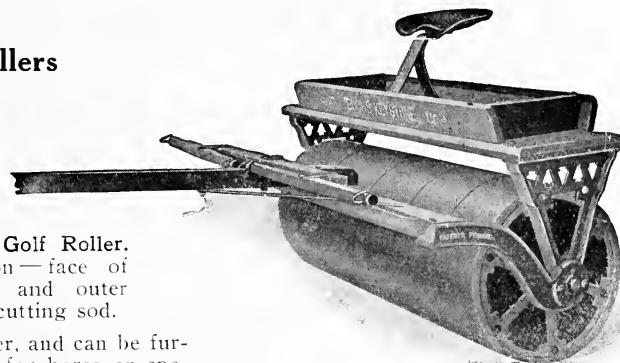
No.	Dia. in.	Lgth. in.	WEIGHT			Price
			Empt.	with Water	with Sand	
GWR601	14	24	70	175	400	\$10.50
GWR602	18	24	85	265	475	12.50
GWR603	24	24	110	420	630	16.50
GWR604	24	32	130	515	850	18.50



## Water Fairway Roller

No. 20, Diameter each drum, 36 in., Length each, 36 in., Section, 3 in., Weight, 1,300 lbs., Filled water, 5,000 lbs., Price, f. o. b. Chicago.....\$175.00

## Golf Rollers



### Our Heavier Type of Golf Roller.

Drums are cast iron—face of drum ground smooth and outer edge rounded to avoid cutting sod.

A strong, durable roller, and can be furnished either with pole for horse or special tractor hitch. Specify which is desired.

Exceptionally light in draft and has adjustable balance, which relieves all weight from team under any conditions. Sizes 377 to 382 are special and to order only. Delivery 10 days.

#### Regulation Type

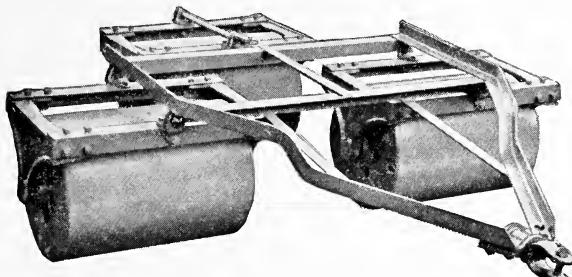
No.	Dia., In.	Lg., Ft.	Sec- tions	Face In.	Wgt. Pounds	Price
GR370	20	5	5	12	1150	\$142.00
GR371	20	6	6	12	1300	156.00
GR372	24	5	5	12	1450	178.00
GR373	24	6	6	12	1700	204.00
GR374	28	4	4	12	1350	170.00
GR375	28	5	5	12	1650	202.00
GR376	28	6	6	12	1950	234.00

#### Extra Heavy, Furnished with Steel Frame

No.	Dia. In.	Lg. Ft.	Secs. 12-in.	Weight Pounds	Price
	4		4	2500	\$310.00
	5		5	3000	360.00
	6		6	3500	410.00
	4		4	3000	376.00
	5		5	3500	428.00
	6		6	4000	480.00

FREIGHT ALLOWED.

## Tandem Golf Roller



A Flexible Tractor Golf Roller for Golf Courses and Large Estates.

Completely rolls uneven ground.

Frame—Heavy Angles Steel Construction.

Drums—Heavy Cast Iron—Outside Round Edge.

Gang Draw Bars so constructed that whole Roller is flexible and gangs work independently and follow surface undulations.

## Putting Greens Roler

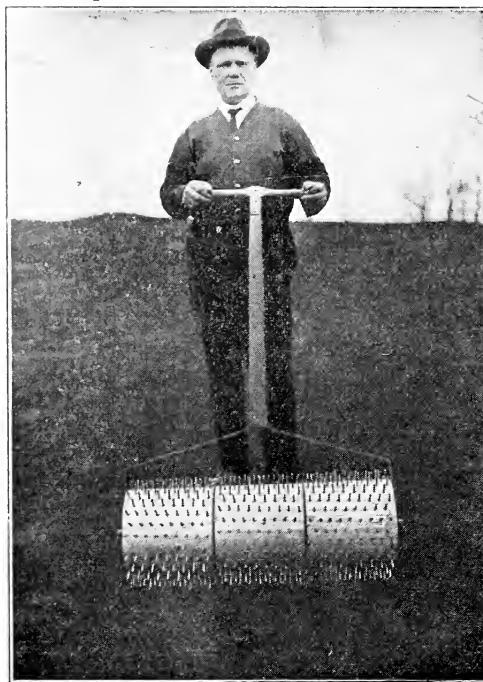


To meet the demand from golf clubs for a substantial, smooth face, light roller for putting greens, this cast drum roller was designed. It has outer drums with round edge and will turn around within its own radius with each drum rolling without cutting the sod. These cast drums are ground perfectly smooth, and are preferable to the wood type.

No. 700—4 feet wide; 4 drums, each 12 inches long, 10 inch diameter; weight, 160 pounds. Price.....\$25.00  
F. o. b. Chicago.

Description of sizes					
Diameter	Sections	Weight	List	Price	
No. 390	Inches 20	Gang 3	12-inch 9	Pounds 1650	\$250.00
391	24	3	9	2200	330.00

COMPLETE STOCK ON HAND AT ALL TIMES

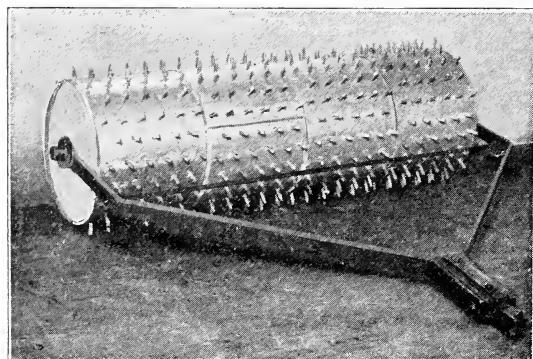
**Spike Roller—for Greens**

The best and most mechanically perfect spiked roller on the market. Note that this roller comes assembled in three sections. No danger of tearing up turf while turning. For aerating, seeding and fertilizing the soil.

**DESCRIPTION**

Concrete—Weighs 285 pounds. Ten-inch diameter. Three sections of ten inches each—making it 30 in. in length.

**GSR-1.** Price, f. o. b. Chicago.....\$50.00

**Spike Disc No. 30**

The high carbon alloy steel saw teeth cultivate and aerate in one operation, eliminating hard baked surfaces and forming a mulch so necessary for the retention of moisture. And the Knife-life blades do not leave ugly holes with hardened edges as do old type implements with round or square spikes. 19 discs, each 9 1/2" diameter. Rolling width, 18". Net wt., 90 lbs. Crated 130 lbs.

**No. 30.** Price, one man.....\$25.00

**No. 32.** Price, two men.....30.00

**Junior Spike Roller**

Same general construction as the greens roller, except is 2 section, weighs 170 lbs.

**GSR3**—F. o. b. Chicago.....\$40.00

**Power Spiked Roller**

This roller has seat and drawbar for attaching to Power mowers. Weighs 365 lbs. and is 4 section. 40" wide.

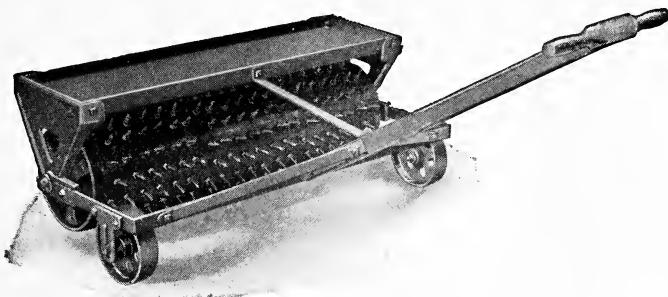
**GSR-4**—Price, f.o.b. Chicago, \$85.00

**Spike Roller for Fairways**

A heavy roller that will loosen the soil on hard, baked or burned fairways—allowing air and moisture to reach the roots of the grass, thus keeping the fairways green and healthy. Can be drawn by horse or tractor.

**GSR-2**—Weight, 1600 lbs., 14-in dia., 4 sect., 60 in. midth, F. o. b. Chicago.....\$100.00

## Hand Spiked Roller



**No. 702.** This roller is built especially for spiking greens by hand, is a 3-section, each section being 10 inches in diameter and 12 inches long. Rolls 30 inches wide. It weighs 190 lbs. Spokes are easily removed.

Price ..... \$70.00

**No. 705.** 3 gang 2 section each 18" diameter, rolling space 105", weight 1325 lbs.

Price ..... \$400.00

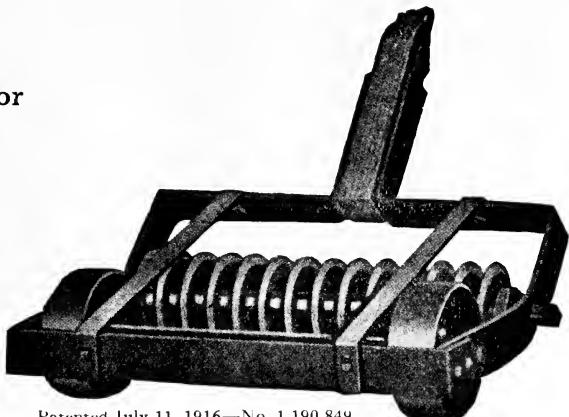
F. o. b. factory. Factory shipment.

## “Tom Bendelow” Putting Green Cultivator

A 11-steel construction and finest workmanship.

This cultivator will aerate and enrich the soil; permits seeding during the hot periods, strengthens the root mat, and destroys Crab and other spreading or creeping weeds.

**GC-3.** Price ..... \$50.00

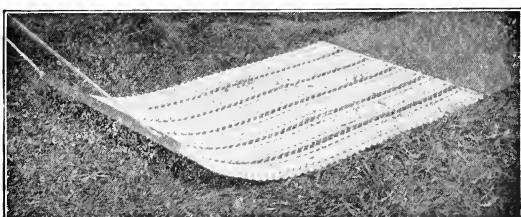


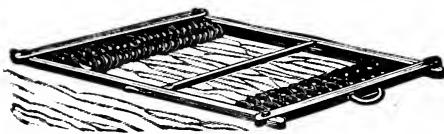
Patented July 11, 1916—No. 1,190,849

## Flex Mat Top Dressing Drag (Patented)

After floating-in top-dressing, is should be worked down around crown of grass. This can best be done by the use of our dressing mat. Takes off surplus and trues the green.

<b>GFM1—28x48 in., each.....</b>	<b>\$ 4.25</b>
<b>GFM3—30x60 in., each.....</b>	<b>5.75</b>
<b>GFM2—4x6 ft., each.....</b>	<b>11.50</b>
<b>GFM4—6x10 ft., Fairway Dandelion Drag, same construction. Tractor hitch.....</b>	<b>22.00</b>





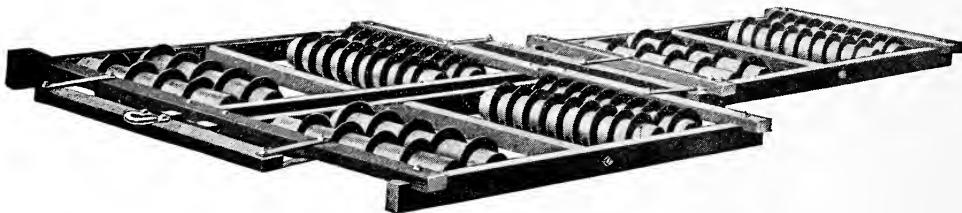
### Meeker Smoothing Harrow

A perfect pulverizing and smoothing harrow and land roller. Grinds up all lumps, leaving soil fine and smooth. The board in the center serves as a leveler and can be adjusted.

	Size	No. of Discs	Dia. of Discs	Price
GMH4	4½'x4'	46	8"	\$42.50
GMH3	6'8"x6'	58	8"	48.00
GMH5	6'8"x6'	58	10"	58.50
GMH2	8' x6'	82	8"	63.75
GMH1	8' x6'	82	10"	74.70

F. O. B. Chicago.

### The Meeker Discing Machine



Designed for use on golf courses, parks, and private estates where the grass either is not growing on account of the roots being choked and parched, or where it is desired to reseed without going to the expense and trouble of entirely tearing up the sod by plows or other heavy implements.

The machine, complete, has three sections, but the sections can be used as a single unit.

Each section frame measures 6' 8" long x3" wide, and each section has four sets of rollers, with 30 steel cutting wheels, 8" in diameter, which can be set at a slight angle where it is desired to scarify the turf for reseeding, or can be set straight where the intention is merely to cut runners, or to break up the grass to aerate the roots. Where the soil is hard, the machine is capable of being burdened up to 1,000 lbs.

**GMD-3**—Price complete, f. o. b. Chicago, Three sections.....\$90.00  
**GMD-1**—Price, Single section, f. o. b. Chicago.....30.00

### Imported Scotch Chain Harrow

**Greenskeepers on golf courses** state it is the most valuable implement on the market for surface pulverizing and leveling. It is far superior to the average disc or tooth harrow, as it not only pulverizes the soil thoroughly, but also fills in all inequalities in the ground, thus insuring a smooth, even surface for seeding grass.

As the final surface smoother on grading jobs, it is without an equal, for it obliterates all motive power marks completely. This implement has been in use for years on race tracks, driveways, golf courses, etc., for smoothing out footprints and ruts.

The heavy links are fashioned by skilled workmen in Scotland from solid wrought iron and are therefore very durable. When not in use it may be rolled up completely, so as to occupy a minimum amount of storage space.

**1—Medium Size.** 6'x7½", weight 170 pounds, f. o. b. Chicago.....\$42.00  
**2—Large Size.** 7½"x7½", weight 220 pounds, f. o. b. Chicago.....53.00

## Pennsylvania Lawn Cleaner

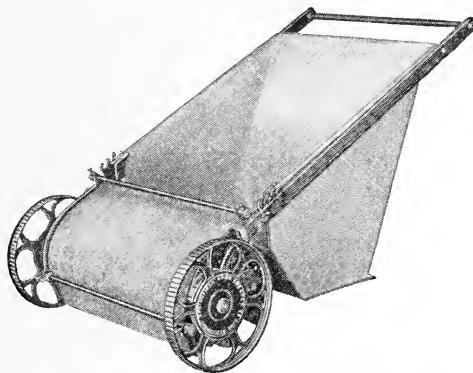
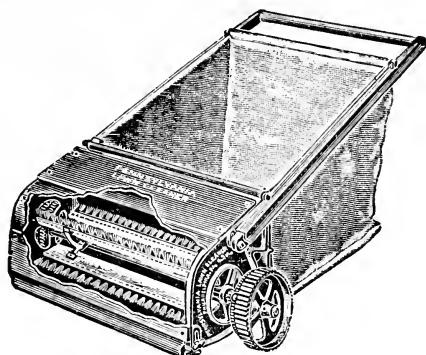
This machine will remove from the lawn not only the cut grass, but all sorts of litter, leaves and trash, leaving the grass standing upright and free from foreign matter that prevents the sunlight and dew from getting to the roots.

The brushes are recommended for removing worm-casts from putting greens, tennis courts, bowling greens and other close-cut lawns, where a smooth surface is essential. It can also be used as a lawn or sidewalk cleaner for removing leaves and other litter.

Provision is made for adjustment to take up the wear of the brushes, thus insuring the same efficiency of the sweeper until the brushes are entirely worn out.

The change from rakes to brushes, or vice versa, is easily made without taking the machine apart. Width, 24 inches.

Price, each, f. o. b. Chicago.....\$30.00      Extra Set Rakes or Brushes.....\$7.00  
Always designate "Rakes" or "Brushes" when ordering.



## Thompson Swiftway Sweeper

A very useful new tool for golf greens, parks, tennis courts and estates, which will quickly pay for itself in time saved. It covers a large surface quickly. Sweeps in either direction, although designed for pushing.

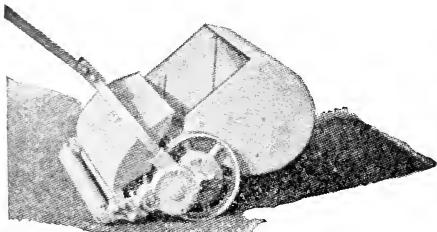
The wheel stabilizes the pressure, which can be automatically controlled by the operator, and relieves him from lifting the weight of the brush throughout the operation. The handle can be adjusted to suit the operator and to allow for wear of the brush. The brush units are replaceable at small cost. They are made of a good grade of bassine.

Useful on greens for sweeping of sticks, stones, paper, leaves, ant hills and worm casts, for brushing in top dressing and brushing up grass before cutting. It is a very rapid sweeper for lawns, tennis courts, walks, pavements and all large floor areas.

No. 48—Thompson Swiftway Sweeper, with 48-inch brush.....\$17.50  
No. 32—Thompson Swiftway Sweeper, with 32-inch brush.....15.00



## Improved Pennsylvania Green Mower



Light running smooth cutting high wheel green mower. Has been used for years by green-keepers all over the world where golf is played.

Its high gear drive insures ridgeless close cut. Reel five and one half inches in diameter has seven crucible toolsteel blades oil hardened and tempered. Runs on ball bearings. Wheels and intermediate gears have roller bearings.

Nineteen inch cut  $\frac{1}{8}$  to  $1\frac{1}{8}$  inches high.  
 Price ..... \$40.00  
 Grass box ..... 8.00

## Pennsylvania Super Roller Green Mower

Is made as all Pennsylvania Mowers are, to do the finest work with minimum effort. Superior construction, will last for years with little attention.

### Specifications

High speed eight blade reel of finest crucible steel oil hardened and water tempered.

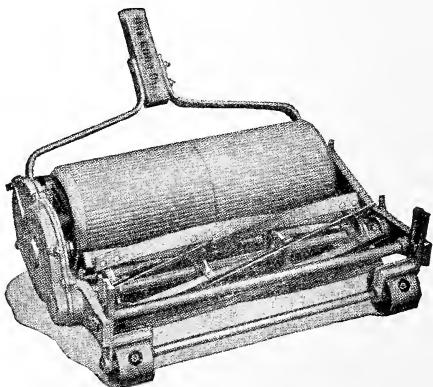
Rollers seven inches cast aluminum.

Bearings ball and roller oil tight and dust-proof.

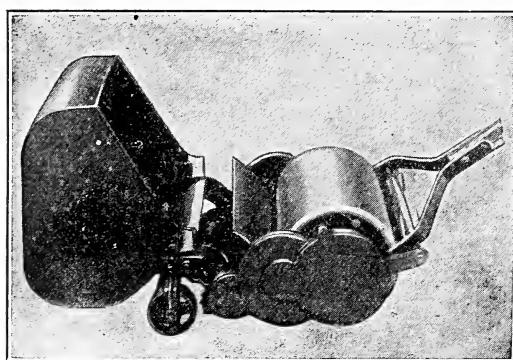
Alemite lubrication. Positive precision adjustment.

Eighteen inch cut. Height of cut  $\frac{1}{8}$  to  $1\frac{1}{8}$  inches.

Mower .....	\$52.00
Grass Bos .....	8.00
Carriage .....	5.00



## National Putting Green Mower

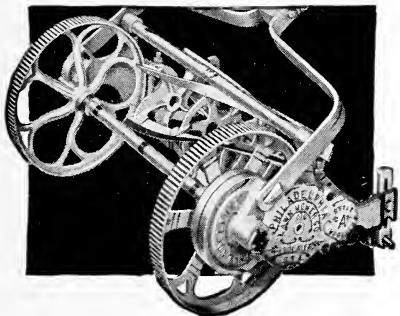


ASK FOR INFORMATION  
 REGARDING THE NEW  
 NATIONAL PUTTING  
 GREEN MOWER.

## PHILADELPHIA LAWN MOWERS

The product of master craftsmen. Largest and most complete line of hand lawn mowers. Pace-setters in the hand lawn mower trade since 1869. Every mower carries full guarantee. Write for Philadelphia catalog.

### Style "A"

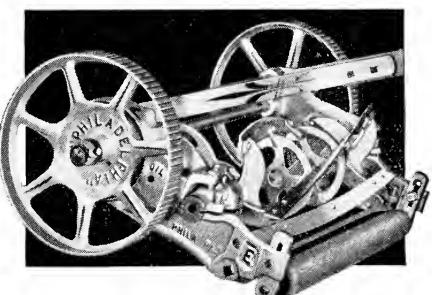


Style "A"—highest grade mower of its type—equipped with single train gears to attain lightness. Revolving cutter driven by both wheels, using two ratchets. Adjustable bearings in revolving cutter journals, oil holes protected with oil-cups insure proper lubrication. High wheels with wide, milled treads. Revolving cutter of large diameter removable for sharpening without disturbing any other parts. Stationary knife of Chrome steel, mower practically indestructible, side frames and wheels of malleable iron. 10" Dr. Wheels, 6½" dia. reels, 4 or 5 blades.

List prices (Write for discount)

15"	\$30.00	19"	\$38.00
17"	34.00	21"	42.00

### Style "E"

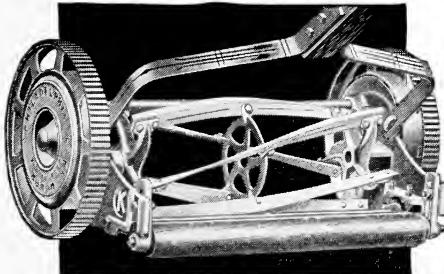


Style "E"—Built for hard, continuous service particularly adapted for use in parks, cemeteries, large estates. Long life in constant service assured by over-sized bearings of revolving cutters, fitted with removable caps so that cutter can be removed for grinding quickly, without disturbing other parts of mower or affecting any adjustment. Mower is equipped with single train gears to attain lightness. Revolving cutter driven by both wheels through use of two ratchets. Main bearings equipped with oil cups insuring protection from dirt. 10" Dr. Wheels, 6½" dia. reel, 4 blades.

List prices (Write for discount)

15"	\$30.00	19"	\$38.00
17"	34.00	21"	42.00

### Styles K and KRB



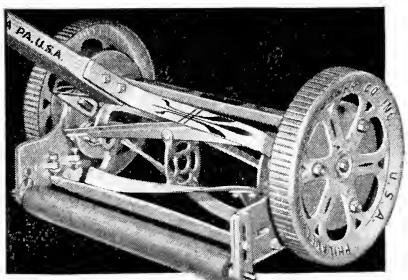
Style "KRB"—made to meet demand for light weight, high grade mower. Internal gear machine with flat sliding-pawl ratchets at each end of revolving cutter. Equipped with adjustable roller bearings in revolving cutter of large diameter. Good mower for cutting high grass. Stationary knife is of extreme hardness, will hold edge for long time.

Style "K" is identical to Style KRB except that it is equipped with Arguto Oilless Bearings. 10" Dr. Wheels, 6½" dia. reels, 5 blades.

List prices (Write for discount)

14"	\$24.00	18"	\$28.00
16"	26.00	20"	30.00

### Style "BB"

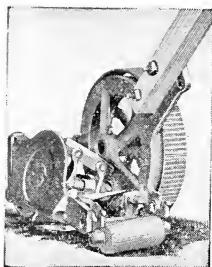


Style "BB"—Excellent light running, ball bearing machine, representing quality at reasonable price, costing little more than most mowers. Distinctly superior in strength, ease of operation and mowing performance. Drive wheels and side frames of pressed steel, practically unbreakable. Radial ball bearings are accurately ground, dirt and dust proof, require no adjusting—only part of mower requiring any adjusting is stationary knife. Height of cut  $\frac{3}{4}$  in. to  $1\frac{1}{4}$  in. Internal gear driven with flat sliding pawl ratchets. Broad faced, wide milled wheels. 10" Dr. Wheels, 5½" dia. reels, 4 blades.

Prices Net

12"	\$11.00	14"	\$11.00	16"	\$11.00
-----	---------	-----	---------	-----	---------

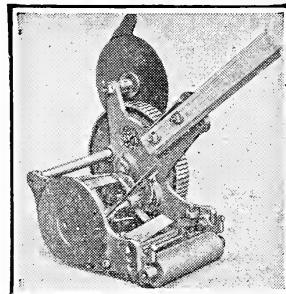
### Pennsylvania Undercut BB Trimmer



The unique construction of the Undercut Trimmer permits cutting, not only close up to a wall, fence, tree, etc., but it will get the grass under a fence or up to foundations and other places hitherto out of reach of anything but hand shears. The slanting side plate and conical cylinder make it possible to cut all grass left by regular style of lawn mowers. Has adjustable steel clamps on handle cross bar.  $9\frac{1}{2}$ " drive wheel. Four blade cutting unit. Cut  $5\frac{1}{2}$ " swath.

**GUT-1**—F. o. b. Chicago.....\$12.00

### Pennsylvania Ball Bearing Trimmer and Edger



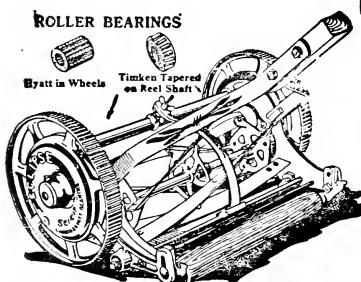
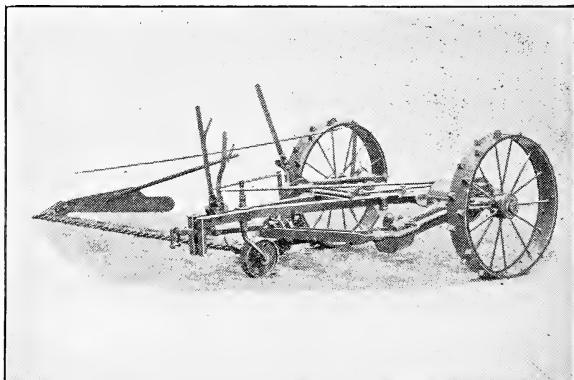
With the machine which consists of a Pennsylvania Ball Bearing Trimmer equipped with steel disc and small plow, you can trim overhanging grass along edges of walks and flower beds and do similar work that has heretofore required a half-moon hoe, grass-hook or hand shears. Combined Trimmer and Edger is a most useful labor-saving tool. Handle is adjustable to suit height of user and steel disc is securely braced. Width of cut 6 inches.

**GST-1**—F. o. b. Chicago.....\$12.00

### Thomas Rough Mower

This mower is built for high speed tractor work. Has a 6 foot bar and will cut 3 acres per hour. Operated by man or tractor. Attached or detached instantly. Hyatt roller bearings. Two speed sickle.

Price, f.o.b. Chicago....\$150.00



### Eclipse Lawn Mowers

Simple goose neck bar adjustment—no tools. Timken large tapered roller bearings on reel adjustable with screw cup, Hyatt roller bearings on wheels. Five special tool steel blades. Self sharpening device reversing sleeve on shaft.

10 inch wheels.  
Ask for special freight paid price.

## Johnson Motor Scythe

Whatever a Hand Scythe will do, in one-eighth the time.

The Johnson Motor Scythe is adapted to all kinds of weed and grass mowing. Will equal in results work of at least eight men with hand scythes. Easy to operate in places where large mowing and cutting machines cannot go—around shrubbery, trees, wooded sections, and in rough places, which heretofore have required costly hand-cutting. Because the large wheel runs free of the motor, the scythe back up easily; can be tilted (similar to a wheel-barrow) to cut up or down slopes; and can be pivoted sharply in any desired direction.

Cuts only as fast as it is propelled. By slowing down speed of propulsion, sickle acts as a saw and will literally "saw" through heavy growth that would stall a horse-drawn mower.

Simplicity of construction and ease of operation are such that a fifteen-year old boy can handle it. Johnson Motor Scythe will rapidly pay for itself from savings it effects.

### SPECIFICATIONS:

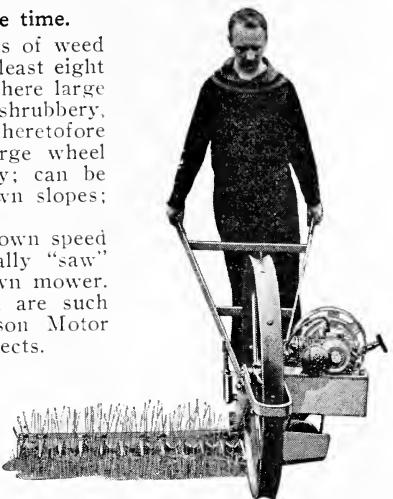
Weight: 160 lbs. Perfectly balance. Frame: Pressed sheet steel, welded and riveted. Wheel: 30 in. diameter field type with 3 in. concave tread. Cutter Bar: Standard Sickle type 36 in. in length, with adjustable wearing plates.

Motor:  $\frac{1}{2}$  H. P. Johnson single cylinder, 2-cycle, no gears or valves and few moving parts; equipped with pull starter, button stop, muffler, fuel-lift carburetor with synchronized choke and gas feed. Motor drives only cutter bar by belt, independent of traction.

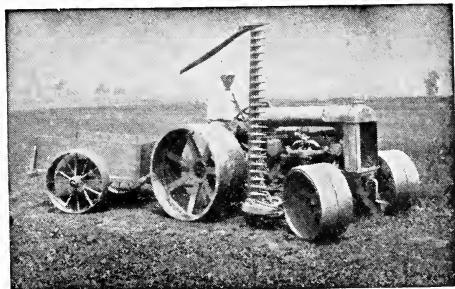
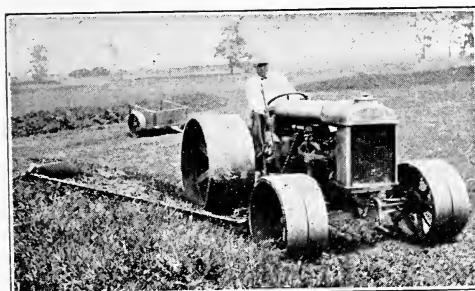
Gas Tank: Sheet steel,  $\frac{1}{2}$  gal. cap'y, sufficient to operate scythe for five hours.

Guarantee: 90 days, against any defects in material or workmanship whatsoever.

Price.....\$140.00



## Detroit Rough Mower FOR OLD AND NEW FORDSONS



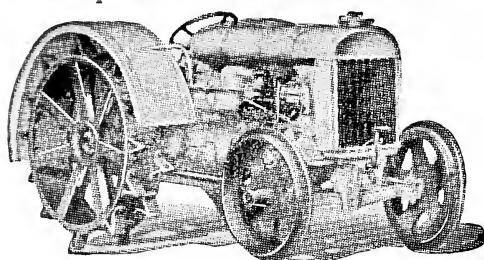
Also as shown above for cutting side of bunkers. Will save labor of four teams, wear and tear on revolving reel mowers, cut 50 acres of rough as low as 1 inch in height in one day. Extreme simplicity. No change in Fordson necessary, no changes on worm gear, no tractor oil to drain. Assembled in 30 minutes. Flexible in all capacities, cutting bunkers, or hills and can be set up as shown without impairing use of Fordson. Cutter bar always in plain view of operator, mowing bar 6 feet long. Coil spring in front drag bar absorbs shocks when running into stumps. Power taken directly from the pulley gear—mower runs at motor speed, not wheel speed. All gears and shafts automatically oiled from Fordson. It fulfills a most valuable service to golf courses, race tracks, baseball diamonds, polo grounds, sub-divisions, parks and cemeteries. Further circular information on request.

**GDM-6**—Two speed transmission ball bearing with two knives, for old Fordsons.....\$185.00

**GDM-7**—Two speed transmission ball bearing, for new Fordsons.....185.00

F. o. b. Chicago.

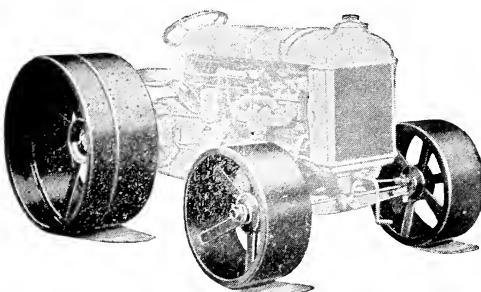
## Improved Fordson Tractor



From the preparation of the seed bed in your first section of your golf course, the Improved **FORDSON TRACTOR** goes from one task to another, fulfilling its promise to "deliver the goods" more efficiently, more economically than is possible with any other power equipment. In the new section - plowing - disking - harrowing - seeding. In the developed sections - mowing - towing - where power take-off belt power is needed the answer is supplied - "**FORDSON**" - ALL in a day's work with an Improved "**FORDSON TRACTOR**." Write for descriptive literature and prices delivered to your station.

**IMPORTANT**—A full stock of parts for every model of Fordson on hand at all times. Write for parts book.

## Wide Wheels for Fordsons

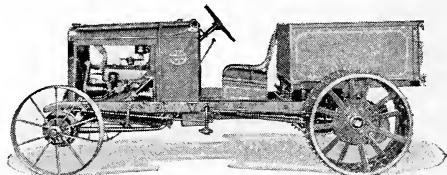


The wide, smooth faced wheels with sod puncher pins in each wheel provide necessary traction and at the same time improve the lawns. Rear wheels are 19" wide. Front wheels are 14" wide.

Price, 4 wheels complete.....\$135.00  
**GWW**—Two rear wheels..... 82.50  
**GWW**—Two front wheels..... 62.50  
**GPP**—Sod puncher pins, per 100.. 10.50

F. o. b. Chicago.

## Proven Silent Drive Staude General Utility Golf Course Tractor



Anybody can operate it.

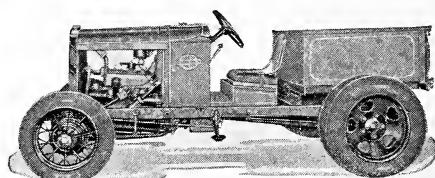
Price, f. o. b. St. Paul.....\$725.00

f. o. b. Chicago..... 755.00

(Complete including new Model A Ford.)

Built especially for golf courses. Has the surplus power needed without excess weight. Has the right speed, 1 to 15 miles per hour in high gear. **Noiseless** running. Has short turning radius. No skilled mechanic required to operate it. Lowest in operating cost. Easily pulls any 5 or 7 section mower in high gear, 6 ton roller, hay mowers, plows, discs, scrapers. Hauls any make of implement, can be easily attached. Rear axle will support 3,000 lbs. Repair costs are practically nothing. Tractor sold on money-back guarantee.

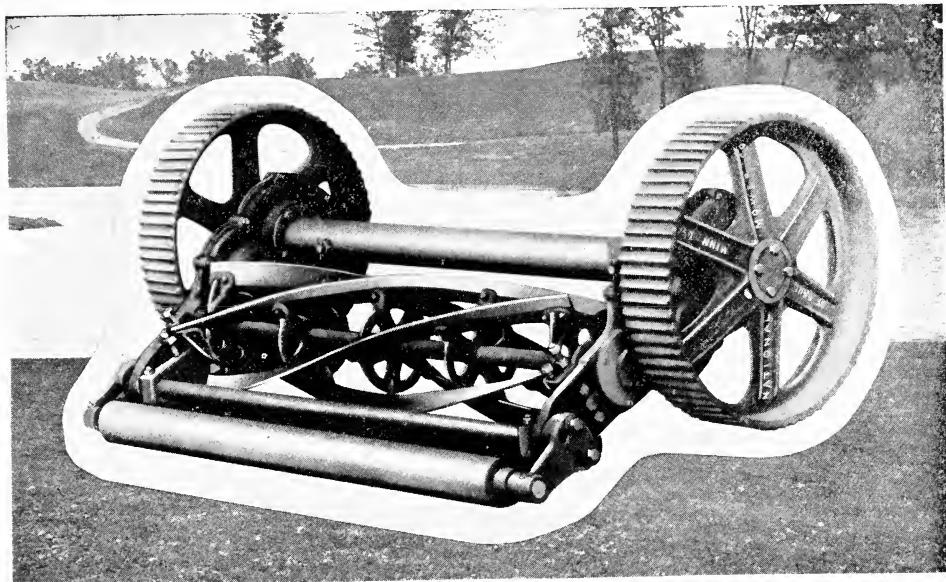
Weight about 2,400 lbs.



Tractor wheels demountable and easily replaced by Ford pneumatic tired wheels for paved roads. Weight about 2,600 lbs.

Price, f. o. b. St. Paul.....\$795.00  
f. o. b. Chicago..... 826.00

## NATIONAL MOWERS



## A MOWER OF RUGGED ENDURANCE AND UNSURPASSED QUALITY.

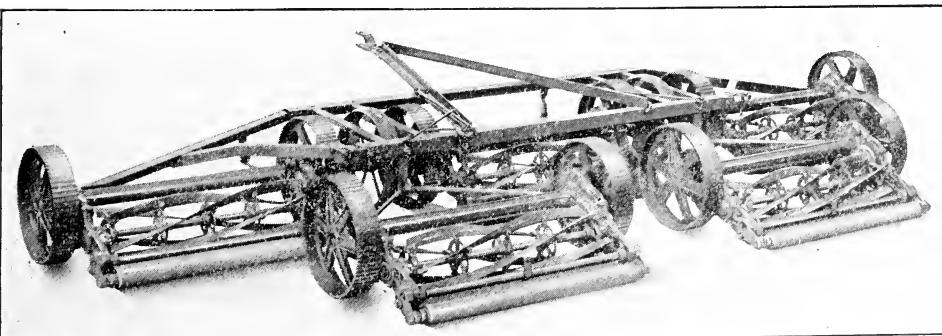
The **NATIONAL** Fairway Mower was built and developed with the definite intention of making it the sturdiest, the longest lived mower that was possible to put on a Golf Course.

The National 30" heavy duty mower uses hardened and tempered machine cut steel gears in oil tight transmission cases. There is a set of these gears on each side, so the mower is in perfect balance. It has the strongest and most rigid frame construction. Wheels are wide with deep grooves. Ratchets are of tempered steel. Timken Bearings on the reel with take-up adjustment.

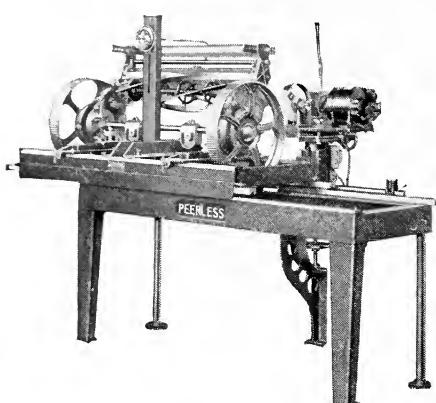
Reel 8" diameter, 30" long, 5 oversize blades of finest cutting steel. Throwout pins for disengaging reel, individual lifting levers on all units.

Single 30" Unit.....	\$ 95.00
Triplex, 86" cut for Tractor .....	335.00
Pole and seat for team, extra.....	10.00
Quint, 140" cut for Tractor (as illustrated).....	550.00

F. o. b. Chicago.



## Peerless Lawn Mower Grinder



No. 300

No. 300—Without Reconditioner Attachment (Shipping wght. 935 lbs.) ..... \$275.00  
 No. 350—With Reconditioner Attachment (Shipment wgt. 1,000 lbs.) ..... 295.00

Prices, f. o. b. Factory.

## Universal Lawn Mower Sharpener

A fine lapping in machine will accommodate every type of mower regardless of size or make—from large power mowers to small Putting Green Mowers—can be sharpened quickly. Mowers are manufactured with a bevel on the fly knives which should last at least three years and then put on the dry grinders to restore the required bevel. It has been found that users in their desire to maintain keen cutting edges put them on grinders too often. This grinds down the blades too soon and a new reel is required.

To obtain best results the fly knives must conform to the bed knife, but not touch it. Only emery and oil should be used on lapping in.

Power is applied directly to reel shaft and mower is sharpened on its own bed knife.

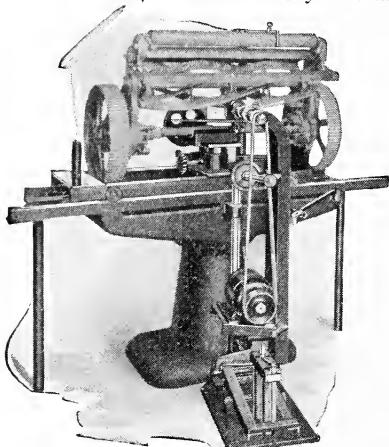
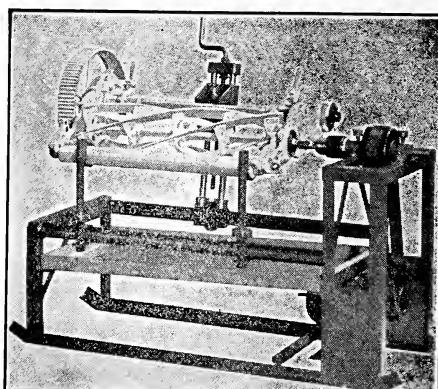
A Titan  $\frac{1}{4}$  H. P. motor, 60 cycle, with reduction gear running in oil supplies the power.

Length, 4 feet  $7\frac{1}{2}$  inches.

Width, 1 foot 8 inches.

Price with 60 cycle 110 Volt motor, \$150.00  
 Additional for extra vise for power

mowers, f. o. b. factory ..... 25.00



## The Hardinge Mower Sharpener

The Hardinge Mower Sharpener was designed to sharpen quickly and accurately any kind of lawn mower. Putting Green, Fairway, hand or mowers with herringbone blades.

It is constructed of most durable material and is so stable as to carry the heaviest mowers with no vibration when operated at high speed.

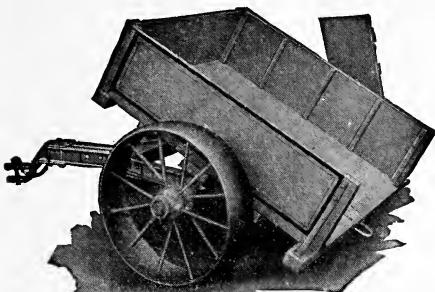
Sharpens the bed knife as well as the reel, and does not require an expert mechanic to operate it.

The grinding wheel is cup shaped and is the only form of wheel that will grind the front edge of the bed knife, the inside surface of the bed knife and the reel blades.

Price, f. o. b. Chicago ..... \$325.00

**Johnson Dump Cart**

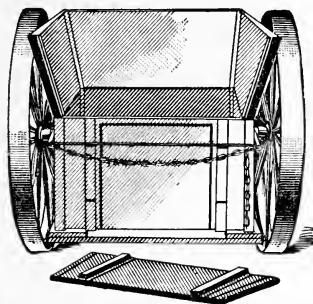
Improved Model—All Purpose



For hauling surplus dirt to dump. Note the specially constructed wide crown wheels, ten inches wide, 40 inch diameter. Spokes are now set in sunken groove. All steel chassis, hard wood box and hopper sides. Front and rear hitch. Angle iron bound—half round iron supports welded to  $\frac{3}{4}$ " bolts thru bottom sill. Box 46x-54x16"—capacity 21 cu. ft. filled level.

**GJC-1**—Cart complete without hopper sides, as illustrated.....\$60.00

**GJC-2**—Cart complete with extra hopper sides ..... 69.00

**Steel Hand Cart**

An exceptionally strong cart for hand work. Steel wheels are 36 inches high and are made with either 2" or 3" tires, as desired. Supplied with platform, also with box or with hopper sides; or may be had complete with all equipment. Freight allowed on actual weight.

Price, each

**GHC-1**—With platform, 2" tires....\$ 9.95

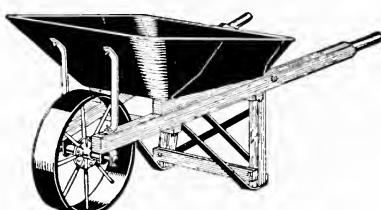
**GHC-2**—With platform, 3" tires.... 11.45

**GHC-3**—Box extra, each..... 3.55

**GHC-4**—Hopper top for box..... 4.50

**GHC-5**—Compl. as shown, 2" tires 18.00

**GHC-6**—Compl. as shown, 3" tires 19.50

**Wide Tread Wheel Barrows**

This barrow constructed sturdily with steel box, well balanced, easily dumped. Note the 4" tread on the wheel which means that the planks may now be dispensed with. Turned edges on wheels mean no marks on turf. Prompt shipment f. o. b. Chicago.

**GTB-1**—Price, each ..... \$9.50

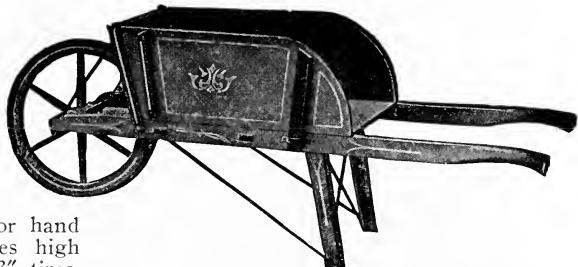
**GTB-2**—Extra wheels fit old barrows, each ..... 3.75

**Wheelbarrow Leaf Rack**

Made of heavy wire will hold about ten bushels.

Easy to put on any wheel barrow.

**GLR-1**—Price, each ..... \$7.00

**Johnson Golf Barrow**

**Extra Strong, Roomy Wheelbarrow—  
Special 3 inch Tire, Wood Wheel.**

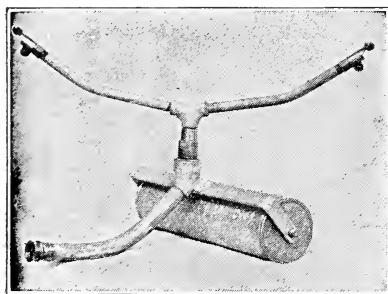
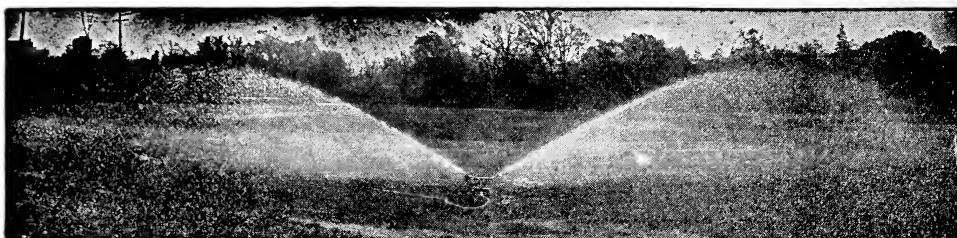
**GB—No. 1—Large Size**

Body—30" long, 24" wide in front, 25" wide in back, each.....\$10.00

**GB No. 2—Medium Size**

Body—28" long, 20" wide in front, 24" wide in back, each..... 9.00

## PERFECTION SPRINKLERS



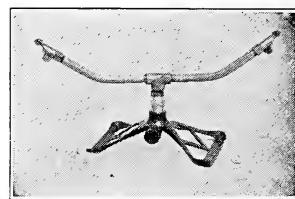
GYR-1

"The answer to your Sprinkling Problems" Actual photograph of the New **PERFECTION** Sprinkler in operation. A 100 foot circle with only 35 lbs. pressure.

By use of an eccentric spray disc which revolves in operation. This new sprinkler accomplishes results that are absolutely essential for complete sprinkler satisfaction.

Easy for anyone to prove by actual tests that these new **PERFECTION** models really do deliver even water distribution — large coverage—constant slow motion at any pressure (as low as 10 lbs.) in the wind or on side hill settings.

**PERFECTIONS** have no adjustments, no small holes to clog—nothing to get out of order—longer life—can be used on fresh seeding. The last word in irrigation and fully guaranteed.

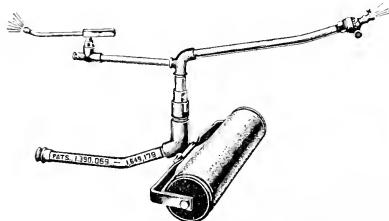


GTS-4

Model	Water Press.	Gal. per hr.	Nozzle size	3/4" size	1" size
GYR-1	15 to 100 lbs.	350 to 2000	3/16" to 7/32"	\$13.50	\$14.00
GTR-2	15 to 50 lbs.	350 to 850	3/16" to 5/32"	11.50	12.00
GTR-3	10 to 50 lbs.	300 to 500	3/32" only	10.00	.....
GTR-4	Same as CTR-3 except has sled base			7.50	.....

POSTAGE PAID TO DESTINATION

## THE LARK SPRINKLER

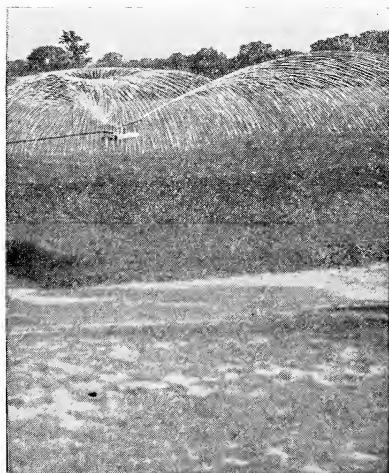


FOR PERFECT GREENS

New Worm Gear Nozzle enables positive control of speed. Sprinkles 75 to 125 feet in diameter, using 7 to 35 gallons water per minute.

Easy to set—easy to move. Always ready for sprinkling.

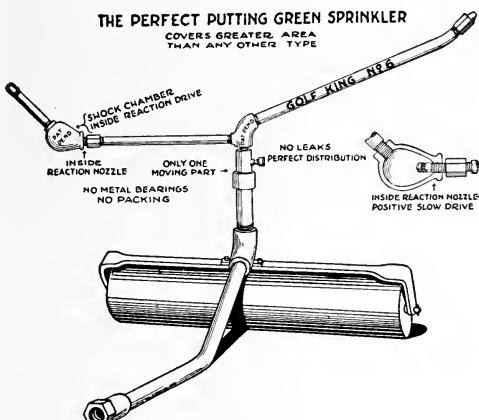
GNL— $\frac{3}{4}$ " or 1" Hose Size, each.....\$15.00



For Golf Green, Parks and Estates.

USE SPRINKLERS THAT GIVE EVEN DISTRIBUTION

## SPRINKLERS



Jr. size on roller stand  $\frac{3}{4}$ ".....\$11.00  
Jr. head only  $\frac{3}{4}$ "..... 7.50

For pressures up to 25 lbs.

For pressures up to 25 lbs.

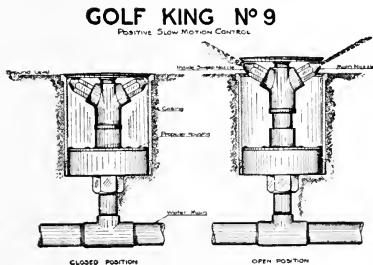
Standard head only 1 ..... 10.50  
For pressures above 30 lbs

For pressures above 30 lbs.  
Oversize on rollers  $1\frac{1}{4} \times 1\frac{1}{2}$ " ..... 19.00

Oversize head only  $1\frac{1}{4} \times 1\frac{1}{2}$ "..... 13.00

For fairway.  
F. & b. Chicago.

IN ORDERING—STATE SIZE OF HOSE USED.



## GOLF KING N° 9

## Golf-King Pop-Up Rotary

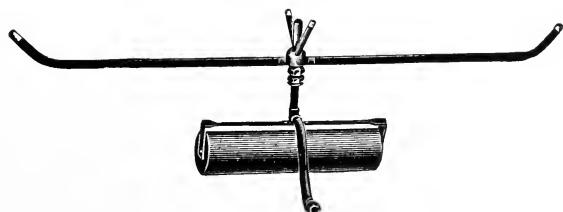
This pop up sprinkler covers the same area as large portable sprinklers now used. Eliminates all labor and hose. One man can irrigate an entire 18 hole course. Concealed, does not interfere with mowers, strong enough to carry the entire weight of a tractor.

Price, f. o. b., Chicago..... \$20.50

No. 303 Sprinkler  
Buckner

Long arm covers 3600 to 4900 square feet on pressure of 40 to 60 pounds. Very efficient in spite of wind. One inch connection.

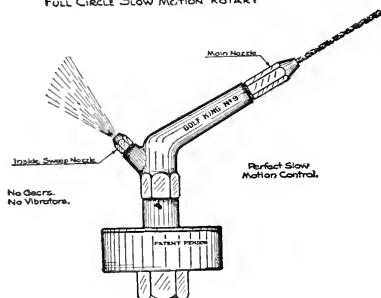
Price, with roller stand.....\$16.00



## Golf King No. 9

### GOLF KING N° 9

FULL CIRCLE SLOW MOTION ROTARY



This sprinkler is the last word in portable slow motion rotaries, designed for use, either on roller stands for hose systems or on Golf King quick coupling valves on semi-automatic hoseless systems. Will work on any pressure above twenty-five pounds and cover more area uniformly than any other sprinkler. It can be set to rotate one revolution in four minutes or four revolutions in one minute. Long running tests on high pressure has demonstrated that it is practically indestructible.

Price, head only.....\$10.50  
 Price, on roller stand.....16.00  
 F. O. B. Chicago.

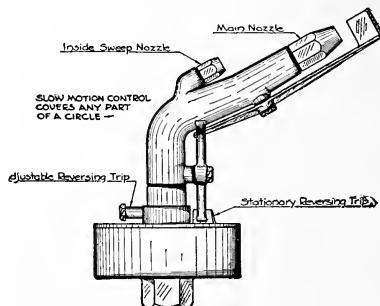
## Golf King No. 9 1/2

Here is the sprinkler the whole world has been waiting for. Heretofore all attempts at part circle oscillating sprinkler construction has been more or less disappointing, due to lack of absolute control. This new Golf King control element has made it possible for us to offer a part circle sprinkler that is perfect in control in every way. It can be adjusted momentarily, to water any fractional part of a circle and will cut in and cut out absolutely to the fractional part of an inch, at the same spot, continuously without fear of sticking. A wonderful sprinkler for use on Snap Valves, around putting greens, along fences, or at the side of fairways, where scalloping is objectionable. It is a labor and water saver for every use. One of its best features is for use on overhead irrigation for orchards and gardens.

Price, head only.....\$13.00

### GOLF KING N° 9 1/2

PUTTING GREEN SPRINKLER FOR HOSELESS SYSTEMS



## Golf King Super Valve

### GOLF KING SUPER VALVE



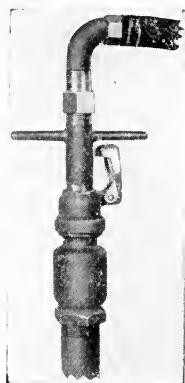
This valve designed for the increasing demand for high pressure systems, where great volume is required for super sprinklers of the Golf King No. 9 type. The Golf King Super Valve will deliver up to 100 gallons per minute with practically no loss across the valve. The flow is straight through the coupler, full unrestricted 1" volume. It has 1 1/2" intake and is self closing both top and bottom when quick coupler is removed. No loose covers to get lost. No trash can get in valve due to misplaced covers. No water hammer. Coupler positively locks when open so that it will not jar loose no matter what type sprinkler used.

Price, Valve only.....\$5.25  
 Price, Coupler.....3.00

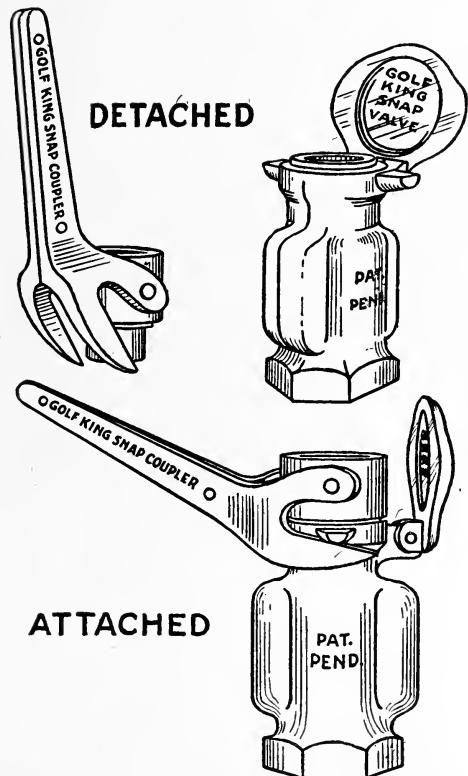
## Buckner Hose Saving Swivel

The Buckner hose-saving swivelled connector consists of a male or female bottomed coupling to which is attached a full-swivelled 90° elbow, ending in a male hose thread coupling. This connector attached to any quick coupler or other vertical outlet such as ordinary valves and street washers.

Price, according to size.....\$2.25 to 2.50



## Golf King Automatic Valve



Designed for Hoseless Systems. Self closing under any pressure. Rigid Quick Coupler. No leaks or wash when attaching or detaching. Connection is instantaneous.

Buckner originated the Hoseless System of golf course irrigation and the rigid quick coupling for connecting sprinklers and hose to systems instantly. And now we have the AUTOMATIC GOLF KING VALVE and QUICK COUPLER. This is a self closing valve allowing no leakage on hillsides or elsewhere. Effects great savings in expense by eliminating many control valves and service leads, as well as all hose and other upkeep cost.

The system is invisible and permits the use of one or any number of sprinklers at any point on the course without running around to open and close valves. Simply snap the sprinkler or the hose—to the valve in five seconds. This automatically opens the valve. Disconnect the sprinkler and valve automatically closes. No valve boxes required. No obstructions or hazards in the fairway. Mower or roller passes over without damage.

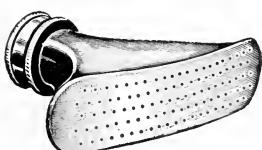
Valve only, 1-inch size.....	\$4.25
Quick Coupling only, 1-inch size.....	3.25
Valve only, 1½-inch size.....	5.25
Quick Coupling, 1½-inch size.....	4.25

F. o. b. Chicago.

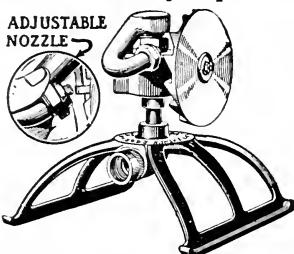
## “Flaring Rose”

For sprinkling flowers, shrubbery and new grass. Throws a soft fanlike spray. Will not hurt most delicate flowers.

GFR—¾" hose size, each.....\$0.50



## Double Rotary Sprinkler



Made with adjustable nozzle, aluminum wheel, removable bearing, hardened steel and bronze gears. Covers from 15 to 80 feet.

Price ..... \$11.50

## Stolon Sprayers



The best sprayer for Stolons. Will not wash away top dressing. All one piece solid cast brass.  
 GSP1— $\frac{3}{4}$ " hose..... \$1.00  
 GSP2—1" hose..... 1.50

## Golf and Lawn Hose

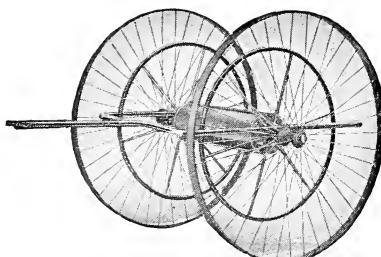
Comparison of our line with hose you are now invited. Write for samples, specifying size. Because of the sturdy construction of Boston Hose we guarantee quality and service at lowest cost.

List prices per hundred feet COUPLED (no charge for couplings.) Write for samples advising quantity, lengths, size, color (black-red-green) and brand.

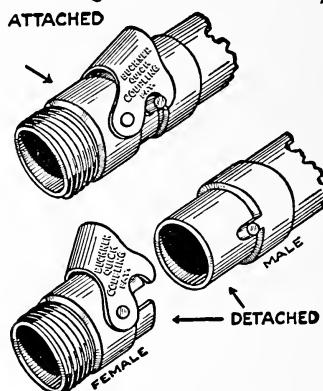


Brand—	Color	Ply	$\frac{3}{4}$ "
Super Bull Dog.....	R or G	2	\$20.00
Bull Dog Cord.....	B only	2	15.85
Thorobred Cord.....	B or R	2	11.63
Non Kink Cord.....	B or R	2	11.63
Vigilant Cord.....	B-R-G	2	10.22
Vim Cord.....	B-R-G	2	10.22
Vixen Cord.....	B-R-G	1	9.52
Bull Dog Plied.....	B or R	7	14.80
Good Luck Plied.....	B or R	6	10.93
Leader.....	B or R	5	9.52
Priced per hundred feet. Coupled in 50' lengths.			

WRITE FOR DISCOUNT.



## Buckner Quick Hose Coupling



No screwing or unscrewing of the hose, coupling instantly made. Will not leak air or water. Use one male coupling at each hydrant and one female coupling for each hose.

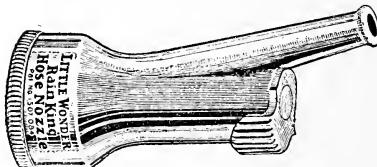
### PRICE LIST

No. 1, for $\frac{3}{4}$ " hose:	
Female part.....	\$0.50
Male part.....	.25
Complete Coupling.....	.75

## Hose Couplings

Complete stock of couplings, menders, etc. Iron and clincher types.

## Little Wonder Nozzle



Nozzle without moving parts to wear, clog or give trouble. Different sprays obtained by new and unique principle. Simple thumb pressure produces desired stream.

GLW—Each ..... \$0.85

## Golf Course Hose Cart

A happy medium. Suitable for a large quantity of small hose or a small quantity of large hose.

Tubular Steel Reel, Frame and Tongue. Steel Wheels with 3" Tires

Numbers of Reel.....	HC90	HC100	HC110
Height of Wheels in Inches.....	36	36	38
Extreme Outside Width in Inches.....	30	32	37
Weight of Carts, complete, pounds, bundled for shipping.....	75	90	100
Capacity of $\frac{3}{4}$ -inch 3-ply Rubber Hose.....	500 ft.	600 ft.	800 ft.
Capacity of 1-inch 4-ply Rubber Hose.....	200 ft.	300 ft.	400 ft.
Price (Factory Shipment) .....	\$26.00	\$30.00	\$42.00

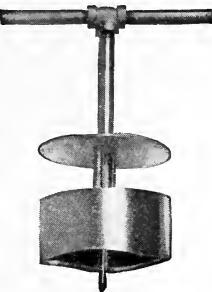
## Johnson Turf Repairers

Circular, Full welded job. For repairing or replacing patches of weeds or "brown patch."

**GTR-6**—6" diameter each ..... \$9.00

**GTR-8**—8" diameter each ..... \$11.00

**GTR-10**—10" diameter, each..... \$13.00



## Crescent Cultivating Rake



Cultivates and cleans the green in one operation.

20 tooth ..... \$2.25

24 tooth ..... 2.75

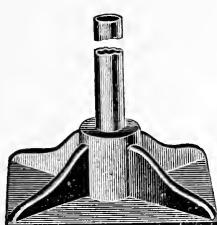
## Sod Tamper

We make these Tamers in three sizes and weights. Complete with heavy pipe handles. Very useful on the course.

**GST1**—8x8—  
20 lbs.....\$3.50

**GST2**—10x10—  
24 lbs.....\$4.25

**GST3**—14x14—  
30 lbs.....\$5.25



## Sod Lifters



**GE90**—Sod lifters, 9" polished steel blade. D handle 2 3/4 ft. Length over all, 4 ft., each.....\$2.00

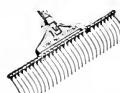
## Edge Trimmers



PATENTED JUNE 28, 1910.

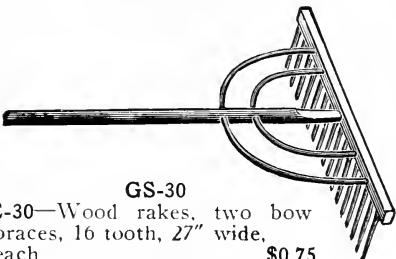
**E139**—Edge trimmers, for sidewalks and traps. Plows a clean "V" shaped trench one inch deep, each..... \$1.50

## Fuller Lawn Brooms



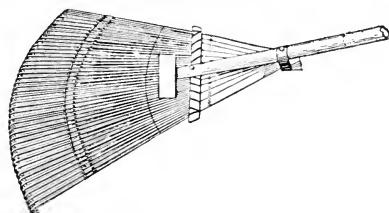
Fuller Lawn Brooms—Spring steel teeth.  
22" wide, 28 teeth—  
Each.....\$1.40      Dozen.....\$14.50

## Wood Rakes

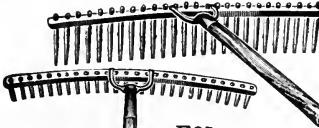


**GS-30**  
**GE-30**—Wood rakes, two bow braces, 16 tooth, 27" wide,  
each ..... \$0.75

## Bamboo Rakes



Have 33 teeth, 18 inches wide, 5-foot handle. Weighs 16 oz.  
**GBRI**—Price, each.....\$0.25

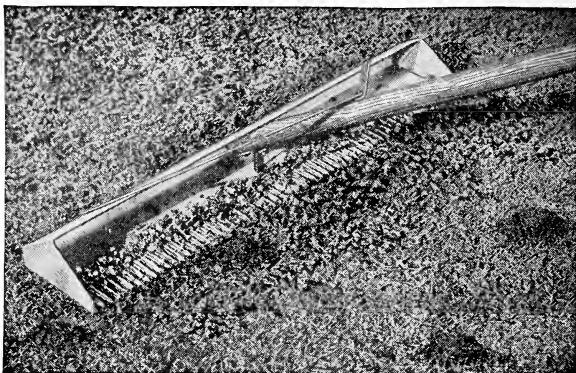


**E27**  
**GE27**—Wood lawn rakes, "Ole Olson," straight or bent head, 26 teeth, 23" wide, each.....\$0.90

## "Early Bird" Worm Cast Rake

Unique tool, simple and effective. Gets every worm cast, dry or damp—rapidly, easily; also all other litter. Can't injure greens. Is excellent for leveling top dressing and as a comb before cutting grass, getting up sprangly branches. Cleans 30-inch path perfectly at a fast walk. Average course equipment, 6 rakes.

GEB-1—Each ..... \$8.50



## Hudson All-Purpose Rake Self Cleaning



The All-Purpose Rake is unequalled for removing yellow dandelions. When it is pulled across the lawn, the stems, leaves and blossoms are wedged between its teeth and easily pulled out. It will pick up the acorns, pebbles, small twigs, etc., which an ordinary rake will not touch, and will clean the lawn of cut grass and dead leaves in better shape than is possible by any other means. It is self cleaning. A single backward stroke clears the rake. Curved so as to roll the rubbish before it.

Handle is polished hardwood, 5 feet long.

Weight 3 pounds each.

GPE16—16" All-Purpose Rake, ea. .... \$0.80  
GPE20—20" All-Purpose Rake, ea. .... .90

## J. O. J. Sand Trap Rake

Invented by well-known professional. Ridges the sand, compels the use of an iron instead of putter. Improves appearance of traps.

Price,  
each \$3.00

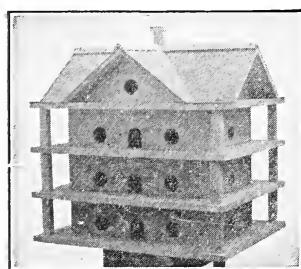


## Mole Trap

Reddick mole traps are positive killers.

For gardens, farms, beautiful lawns, cemeteries, golf courses, colleges, public parks, these traps are indispensable.

GMT1—Price, each ..... \$0.80



## Martin House

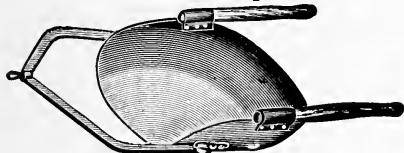
Two or 3 story and attic—3 story has 28 compartments; easily taken apart and cleaned. Size, 22x27x21. Made of Oregon fir. Porch and columns all sides. Ready for painting.

A 4x4 post, 14 feet long, and so made that house is easily taken down, may be obtained also.

GMH1—Price, 3-story house, f. o. b. Chicago ..... \$14.00

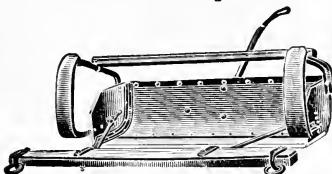
GMH2—Price, 2 story house, f. o. b. Chicago ..... 11.00

GMH3—Price, 14-ft. post with base, f. o. b. Chicago. 9.75

**Road Scrapers**

**GWR1**—Road scrapers, solid 10 gauge steel bowl, 30-in. round hardwood handles. Back shaped to prevent dirt going over top while filling. Will work in any kind of soil.

Cap. 7 cu. ft., each.....	<b>\$8.75</b>
Cap. 5 cu. ft., each.....	<b>8.25</b>
Cap. 3 cu. ft., each.....	<b>7.75</b>

**Back Scrapers**

**GF10R**—Back scrapers, cutting edges made extra heavy of superior high carbon steel and can be replaced when worn, blade 12" wide, 5/16 thick, with runners, in 3½' to 5' width.

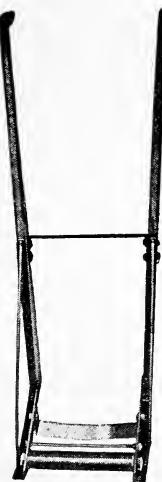
GF10R, each .....	<b>\$30.00</b>
GF20R, each .....	<b>28.00</b>
GF30R, each .....	<b>26.00</b>

**The JOJ Sod Cutter**

This machine is meeting with high endorsement among green keepers and others, and has proved to be a great success. Operates at a low minimum of cost. Cuts the sod of uniform width and thickness, in any length, so that it is particularly adapted to giving solidity to slopes in cuts and on embankments, working equally well on level or uneven surface, cutting both ways with the land, and leaving no sod uncut.

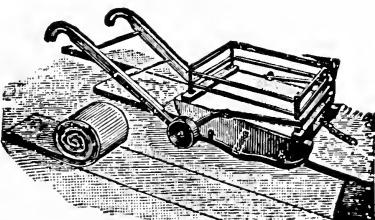
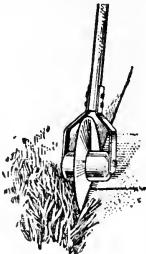
One machine will cut from 30,000 to 40,000 square feet per day, thus doing the work of forty men.

**No. GSC-1**—Price, f. o. b. Chicago..... **\$34.00**

**Hand Sod Cutter**

This is an easily handled sod cutter by which one man can cut 1,000 square yards of sod per day. Cuts any thickness desired. Operates by sharp shoves of the foot.

**GSC2**—Price, f. o. b. Chicago..... **\$25.00**

**Pines Sod Edger**

A handy tool for opening up sod and for marking off before lifting sod. Can't be beat as an edger.

**GSE1**—Price .....

**\$1.00**

**Turf Edger**

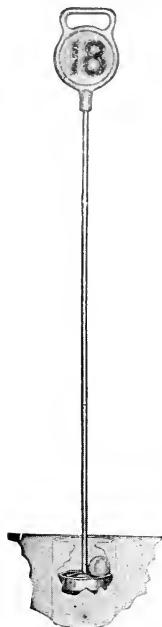
A well made tool for trimming and cutting sod.

**GTE-1**—Each .....

**\$1.25**

## THE STANDARD LINE

### Practice Green Marker



Number plate cast aluminum with 2" letters. Rod and weighted base galvanized. A marker easily readable that picks up your ball.

Weighted base keeps marker in upright position and will fit any cup. Finished natural aluminum background black letters, red background aluminum letters, or orange background with black letters.

**GSS12.** Price,  
each, complete.....\$1.00

### Special Signs

We are in an excellent position to furnish special signs when required. If the list of signs illustrated does not fulfill your needs, advise as to your requirements and we will gladly submit suggestions and quotations.

#### Made from "Standard" Flag Fabric Vat Dipped Dyes—Fast Colors

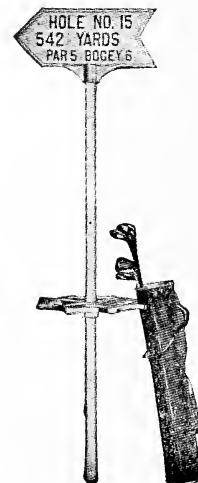
The fabric in "Standard" Flags is closely woven into a 48 square weave, from a hard twisted, high grade cotton thread, to give a firm, substantial and durable flag fabric. The cloth is vat dyed with fast colors.

All "Standard" Flags are carefully made. All hems and reinforcements are double lock stitched with genuine linen thread to withstand the severe whipping received in actual use. Headings are faced with full overlap for grommets, to prevent pulling out of fabric. Numerals are large and distinctive and made from the same quality of fabric as the flags to prevent drawing out of shape and are securely sewed to both sides of the flag with an over-edge stitch.

### Bag Rack and Direction Sign

The Bag Rack and Direction Sign provides complete information regarding the hole and a convenient rack for bags. Sign plate cast aluminum 10x25 inches lettered on both sides. Rack is cast aluminum 20" diameter with space for eight bags. Top edges rounded to prevent damage to the bags. Will fit any 2" O. D. post or can be furnished complete with galvanized post with ornamental ball top.

Sign and Bag Rack, plate only,	\$5.00
any wording .....	
Post, 2" O. D.x8' galvanized, fitted with anchor rod.....	2.50
Bag Rack only.....	3.00
2" O. D. galvanized post with ball top for Bag Rack.....	1.75



### PRICES OF FLAGS

Greens flags with numerals,	
Sets of 9, per set.....	\$3.60
Less than sets of 9—each.....	.45
Greens flags, without numerals,	
Sets of 9, per set.....	3.00
Less than sets of 9—each.....	.35
Direction flags, any style, each.....	.35

All Flags 14"x20".

Specify color combination and  
numbering desired.

### Prices on Special Flags

Furnished on request.

## THE STANDARD LINE



Style No. T-2, 7"x18"

Double faced direction signs. Shows the way to the next hole. Cast aluminum. Complete with 2"x8' galvanized tubular post with anchor rod.

**No. GSS9**—Price, plate only.....\$4.00  
Price of Post, 2" O. D. x 8' galvanized, fitted with anchor rod..... 2.50



## "Arrow Style with Hole Information"

Arrow Tee Marker, Size 5"x11".

A Tee Marker that serves a dual purpose. Shows driving location on the tee and line of play and provides information regarding the hole. Made entirely of cast aluminum with raised letters and cast spikes. One marker with wording "Replace Turf" on left of tee and one with special wording on right of tee is usual combination.

**GSS10**—With special wording, ea.....\$1.50

**GSS11**—With wording,

"Replace Turf," each..... 1.00

## Tee Markers



Mushroom Style

These Tee Markers are self-polishing. (scuffing brightens them.) Cast with direction arrow to indicate line of play. Rust-proof, one-piece cast aluminum, ventilated; will not injure grass.

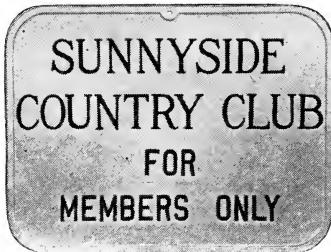
**GST1.** Price, Aluminum Tee Markers, pair ..... \$1.00

## Entrance Signs

Solid Cast Aluminum with Raised Letters. Any Lettering or Design.



Style GE-2, 24"x25"

Style No. GE-1, 18"x24"  
Entrance Sign Price List

No. GE-1—Plate only, any wording.....	\$8.00
No. GE-2—Plate only, any wording.....	9.00
Galvanized tubular sign posts, size 2"x8', equipped with ball top, anchor rod and fittings for attaching plate, each.....	3.00



## Bag Rack

Cast aluminum 20" diameter with space for 8 bags top edges rounded.

Bag Rack only ..... \$3.00

Bag Rack complete with galvanized post and bail cap as shown .... \$4.75

## THE STANDARD LINE



### "Do" and "Don't" Signs

Guests and other visiting players appreciate the convenience of sufficient signs to apprise them of distances, directions, local rules and regulations. They both eliminate playing delays and embarrassing situations.

While unobtrusive, they are easy to read quickly and their cast aluminum construction assures weather and wear resistance. Raised lettering on both sides of  $5\frac{1}{2}'' \times 14''$  plate makes them readable from all angles. Each sign furnished complete with easily removable and replaceable galvanized 18" stake avoiding interference with mowing.

A well kept course is a well marked course.

Any special wording you wish.

Price List "Do and Don't" Signs  
GSS4. Complete, each with stake....\$2.50

### Parking Regulation Signs

Parking on the drive is a problem of practically every private or public golf course. A few signs like this one will go a long way toward doing away with this nuisance.

The plate is 12" in diameter made from cast aluminum with raised lettering on both sides. The base is heavy cast iron, 11" in diameter, and not easily tipped over. You may specify any similar wording you require. Furnished complete with base and posts as illustrated.

Price—GSS5—Parking sign complete.....\$6.00

### Fairway Yardage Marker

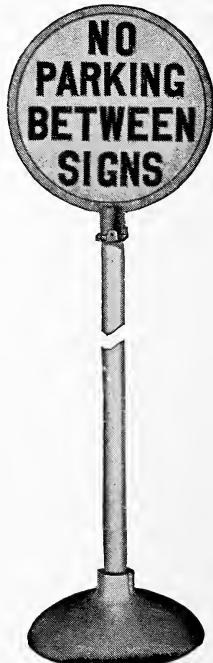


Carries raised figures on both sides so as to be easily readable from any position when sign is set at right angles to edge of fairway.

A real convenience on any course, and greatly appreciated by your players. Made from aluminum and will not rust or corrode. Mounted on galvanized iron stake and easily moved and replaced during mowing.

GSS6. Price, each.....\$1.25  
Any yardage or distance.

4" x  $7\frac{1}{2}$ " cast aluminum plate, 3" lettering.



## THE STANDARD LINE

### Standard Steel Flag Poles

This distinctive pole is constructed from a special, strong, light weight seamless tube,  $\frac{3}{4}$ " diameter, strongly reinforced at the bottom. (See below.) This tube is formed into a beautiful spiral design and thoroughly galvanized. Aluminum ferrule at bottom. Equipped at top with brass rings spaced for attaching standard flags 14"x20". Furnished for other sized flags without extra cost if specified when ordering. Attractively finished in two color combinations, Red and White or Orange and Black. Swivel illustrated at left is easily attached to these poles. Made from Duralumin and works perfectly. Keeps flag from wrapping about pole.

The color combinations make these poles visible against any background, their lightness in weight eliminates injury to the putting green and their rigid construction makes them strong enough to withstand continual usage.

#### Price List—"Standard" Steel Poles

<b>GSP1.</b> Flag Poles, each.....	<b>\$2.00</b>
<b>GSPS.</b> Swivel for above poles, each.....	<b>.25</b>

Flag poles furnished 8 ft. long,  $1\frac{1}{8}$ " or 1" ferrule—two color combinations, Red and White or Orange and Black. Furnished  $1\frac{1}{8}$ " ferrule and Red and White unless otherwise specified.

### New Cast Aluminum Hole Rim

A hole rim scientifically designed and cast in one piece. Absolutely true and of correct standard size. Outside of rim is smooth and made with a slight taper for ease in inserting and extracting from the hole. Wall is thin with top inside edge rounded to eliminate rebound of the ball when putting. Smooth inside—cannot injure the hands. Ball receptacle strongly reinforced sloping to the center and with holes for adequate drainage. Pole socket is long and rigidly braced to always keep the pole in a straight upright position.

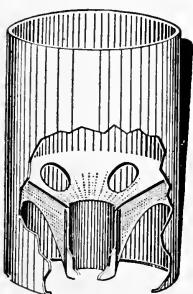
The "Standard" Hole Rim is rust proof, moisture proof and self draining—will not corrode and always maintains its perfect circumference. No other rim fits so perfectly or will last so long. Also is furnished in cast iron.

#### Price List "Standard" Hole Rims

<b>GSR1.</b> Aluminum .....	<b>\$2.00</b>
<b>SR2.</b> Cast Iron .....	<b>1.00</b>
Furnished with $1\frac{1}{8}$ " or 1" Pole Socket. $1\frac{1}{8}$ " furnished unless otherwise specified.	

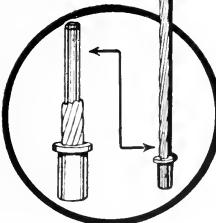
### Standard Hole Rim Extractor

Made of galvanized steel with easy fitting metal handle, price, each..... **60c**



### Special Feature

The illustration at the lower right hand corner shows plainly the unique 18 in. reinforcement. This greatly strengthens the pole at the point of greatest strain and also eliminates the possibility of loosening of the ferrule.



## Lewis Golf Ball Washer

Modernize and give prestige to your course by having the complete Lewis Tee Ensemble at every tee. Members appreciate the Lewis Tee Ensemble and Bag Rack. Lewis Tee equipment is practical, durable, convenient, inexpensive to buy and maintain.

Various items making up the Ensemble can be purchased separately. The Lewis Washer is the most practical device on the market, has proven best and is preferred by golfers as it does a quick, thorough job of cleaning balls. The Lewis Tee stake of heavy painted steel is the backbone of the Ensemble. The Waste Ensemble container provides a convenient receptacle for waste paper, etc.

New Bag Rack made of galvanized pipe with aluminum casting top to hold six bags.

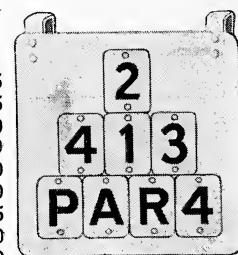
Tee Data Plate provides hole number, yardage and par. Made of non-rusting materials. Send score card with order.

### Prices of Lewis Equipment, f. o. b. Chicago.

Complete Ensembles, lots of 1 to 10, each...	\$10.25
Complete Ensembles, lots of 11 or more, each	9.75
Washers only, lots of 1 to 10, each.....	5.50
Washers only, lots of 11 or more, each.....	5.00
Tee Stake, each.....	1.50
Bag Rack, each.....	5.50
Towel .....	.15
Tee Data Plate.....	1.50
Waste Container.....	1.50
Towel Ring.....	.10



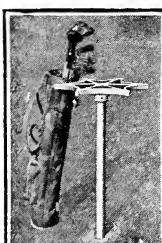
The Lewis Washer



Tee Data Plate



Tee Ensemble



Bag Rack

## Ban



A white powder, contains no grit or acid, dissolves in water, one pound for 8 gallons water.

25 lb. pail.....	\$4.50
50 lb. drum.....	7.50

Freight allowed actual weight.



## Mobo Soap

Recommended  
for this  
Ball  
Washer

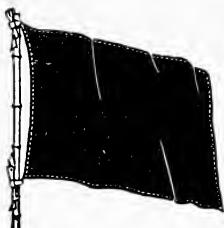
1 lb. can.....	\$ .40
5 lb. can.....	1.50
10 lb. can.....	2.85
25 lb. pail.....	6.75

Freight allowed actual weight.

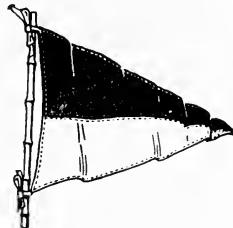
## Johnson Golf Course Equipment



GF19



GF22



GF23



GC15



GD17



GH20

### Greens Flags

Made of heaviest wool bunting with 3 eyelets and tape for attaching to pole. All flags 12x18 and fit Foulis or Winner Swivels. Felt numbers sewed on one side of flag.

**GF19R**—Flags.—Red with white numbers, 1 to 9 or 10 to 18. Set of 9.....\$3.60

**GF19O**—Flags.—Orange with black numbers, 1 to 9 or 10 to 18.  
Set of 9.....\$3.60

**GF19W**—Flags.—White with red numbers, 1 to 9 or 10 to 18. Set of 9.....\$3.60

**GF22**—Flags.—Plain flags not numbered, red, white, orange, etc. Each.....\$0.30

**GF22A**—Flags. Combination colors, not numbered, red and white, orange and white, red, green and orange (Shrine) or any combination of colors. Colors up and down, across or diagonal.  
Set of 9.....\$3.60

**GF23**—Flags.—Triangle shaped red and white, blue and white, orange and white, etc. Set of 9.....\$3.60

We can promptly furnish any size or colored flag desired.

### Steel Hole Cutter

**GC15**—Improved style, with point for centering and device for ejecting earth and sod after cutting clean hole. Cutter is made of steel. Each.....\$6.00

### Standard Hole Cutter

Exclusive design three point cutting edge slicing cut, works either direction. Expeller disc fits snugly to inside of rim, eliminates clogging. Price.....\$7.00

### Practice Green Discs

Metal discs, painted orange with black numbers 1 to 18. A two-foot iron shaft is strongly fastened to disc.

**GD17**—Round, small size, for putting courses. Each.....\$0.85

### Heart Markers

**GH20**—Small heart markers suitable for practice green and miniature courses. Heart is 8"x9". Red enamel with white figures, 1 to 9, and 10 to 18.

**GH2C**—Numbered one side, each.....\$0.80

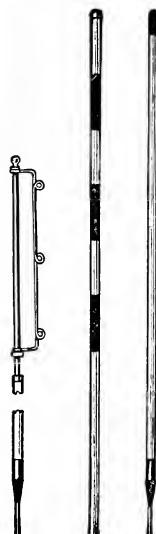
**GH21**—Numbered both sides, each.... .85

## Johnson's Putting Green Accessories



**Johnson - National Tee-Stand.** The neatest and most compact. Stand is light in weight and three point support gives stability. Water pail can be emptied for cleaning by turning upside down. Painted green and white. No bolts used in construction. All joints welded.

Set of 9.....\$ 90.00  
Set of 18.....175.00

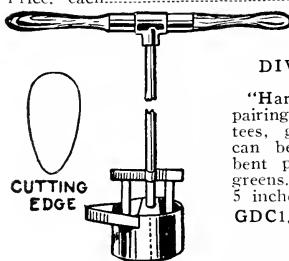


GFS2. GJP1. GSP2.

**GJP1.**—Johnson's Greens Indicator Flag Pole. 8 feet in length, tapers at top to  $\frac{1}{2}$  inch and at bottom to 1 inch. Air seasoned ash painted white with either red or black stripes. Will not warp. Plain base. Each.....\$0.75  
Any size brass ferrule base (State size) Each 1.00  
Spiked base. Each.....1.00

**GSP2.** Steel Flag Pole. Constructed of seamless steel tubing, 8 feet in length,  $\frac{7}{8}$  inches in diameter. Closed top, bottom swaged to  $\frac{3}{8}$  inch spike. Baked enamel finish in red with black tips or black with red tips. Light weight, will last forever. Winner Swivel easily attached. Price, each.....\$1.50

**GFS2.** Foulis Swivel Flag Support. Made of brass. Flag will not wrap around pole. May be attached to any pole by drilling a 5/16 hole in pole. Price, each.....\$0.75



DIVOT CUTTER

"Harry Collis." For repairing and renovating tees, greens or fairway; can be used for putting bent patches into tee or greens. Size 3 inches by 5 inches.

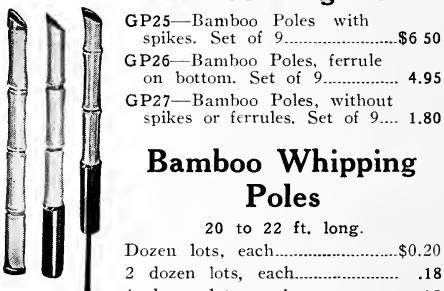
GDC1, each.....\$9.00



**WSS. Winner Swivel.** Made of brass. Will attach to any pole. Flags will not wrap around pole. Will fit any flag. Price, each.....\$0.40

### Bamboo Flag Poles

GP25—Bamboo Poles with spikes. Set of 9.....\$6.50  
GP26—Bamboo Poles, ferrule on bottom. Set of 9.....4.95  
GP27—Bamboo Poles, without spikes or ferrules. Set of 9.... 1.80

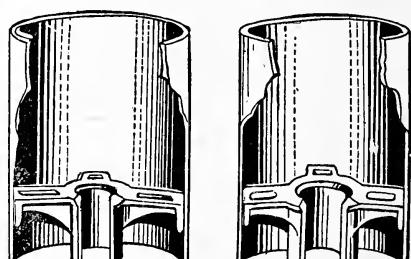


GP27-25-25

### Bamboo Whipping Poles

20 to 22 ft. long.	\$0.20
Dozen lots, each.....	
2 dozen lots, each.....	.18
4 dozen lots, each.....	.15

Johnson's Rustless Hole Rims



Johnson's Rustless Hole Rims

**Hole Rims.** Constructed of seamless steel tubing, rust proofed, unbreakable webs of special alloy and cast in rim. Measurements precisely conform to U. S. G. A. rules.

GHR1— $\frac{3}{8}$ " socket, each.....	\$1.00
GHR2— $\frac{1}{2}$ " socket, each.....	1.00
GHR12— $1\frac{1}{2}$ " socket, each.....	1.00
Above rims with brass shells instead of steel, price, each.....	1.50
GHP1—Hole Rim Puller. Pulls rim straight out. Positive in action. For Johnson rims only. Price, each.....	75

## Johnson's Golf Course Equipment



### Distance Mark

Cast iron signs, background Ducoed white, Figures in crimson, Steel stakes Ducoed green.

Signs  $4\frac{1}{2}$ " x 8". Stake 36". Stock signs 100 to 500 in multiples of 25.

GDM1 ..... \$0.60

### Foulis Swivel Flag Support



No. GFS2—(Pat.)

GFS2—Foulis Swivel Flag Support, for oblong flags. Will not wrap around pole. Revolves in wind. Constructed entirely of brass. Cannot rust.

Support only, each..... \$0.75

### United States Flags

#### DOUBLE WARP WOOL BUNTING

Seams are double stitched. Large sizes above a 9 x 15 ft. flag finished with strong canvas heading and manila rope. Full complement stars sewed on both sides of the field on all flags.

Size ft.	Each	Size ft.	Each
4 x 6 .....	\$5.00	8 x 12 .....	\$18.00
5 x 8 .....	8.00	10 x 15 .....	27.00
6 x 10 .....	11.00	12 x 20 .....	43.00

Other sizes with prices on application.

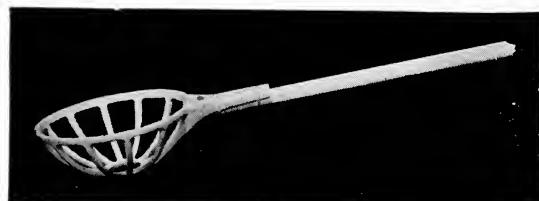


### Club Burgees

Made of Navy Brand double warp wool bunting in three styles: No. 1 Plain without border; No. 2 With plain border; No. 3 Star border as illustrated. Ten letters included at these prices:

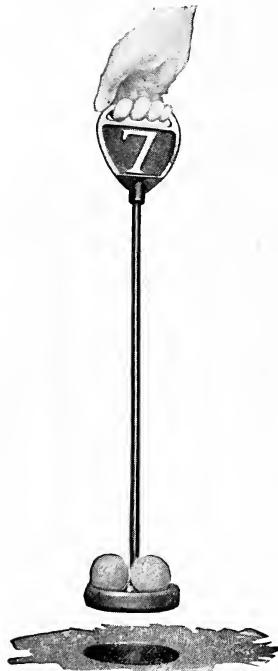
Length Feet	Price No. 1 & 2	Number 3
10	\$11.50	\$13.00
12	15.00	16.50
15	21.50	24.00
20	29.00	34.00
25	43.00	51.00

Other sizes and prices on application also made in cotton bunting at a much lower price.



### Dip Nets

**GDNI**—Made of cast iron to be fastened to a long pole. Light in weight and easily handled. Each.....\$0.50  
**GDN2**—Wire dip nets made of heavy galvanized wire. Each..... .75



### WYCO Marker

The WYCO marker spots the hole—picks up your ball—stands upright on the turf, and is convenient to your hand.

Finished in bright red enamel with raised polished aluminum numerals.

Numbered: 1 to 9, and 10 to 18.

**GWM**—WYCO marker each ..... \$1.25

### Cocoa Tee Mats

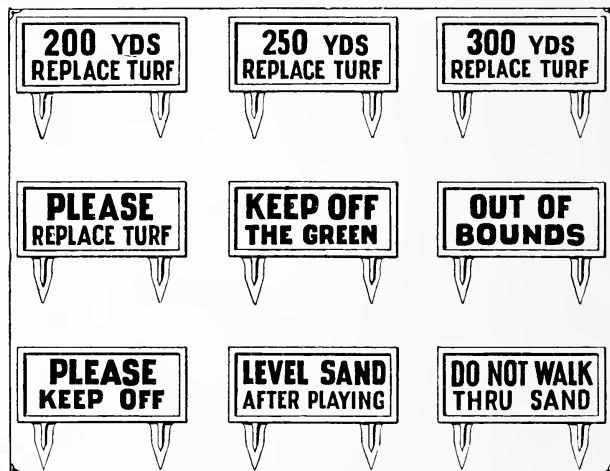


IMPORTED Cocoa Mats, the best obtainable. These mats are very popular on public courses and on grassless tees. They give the same lie as a grass tee and wooden tees may be used.

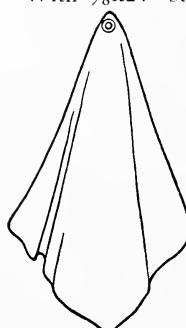
When dressed with sand are far superior to grass or clay tees.

**GCM1**—4'x6', \$14.50    **GCM3**—5'x6', \$18.00  
**GCM2**—5'x5', 15.00    **GCM4**—6'x6', 22.00

### Golf Course Markers



**GM1**—Markers as shown, 14x4½" finished in white with black letters. Each.....\$1.00  
 With 5/8x24" steel rod instead of points, each..... 1.65



### Tee Towels

**GTT1**—Linen Crash unbleached Tee Towels, 14x17. Have 1 grommet.

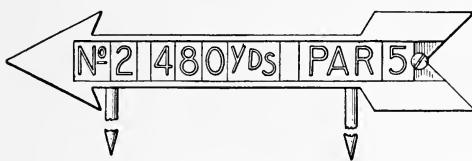
Price, each.....\$ .15  
 Price, dozen..... 1.70

Price, gross..... 18.75

**GTT2**—Heavy ribbed white towels with one grommet.

Price, each.....\$ .15  
 Price, dozen..... 1.70  
 Price, gross..... 18.75

## Johnson's Tee Arrows



In ordering be sure to give number of hole, yardage and par and any extra numbers you may wish.

GJTA1—Price, per pair, complete.....	\$1.75
Extra figures, each.....	.05

## Johnson's Ball Rack



This rack is designed for the First Tee. Balls are placed in upper end and roll to lower end, indicating the order of teeing off.

Tube is closed except for slot, which shows position of ball. Nicely enameled in green, with black trim. A necessity for every course.

GBR1—Price, each.....	\$10.00
-----------------------	---------

### Tee Arrows



**Tee Arrow**  
(Porcelain Enameled)



Used on the Tee to designate where ball should be teed up and played. This Tee Arrow does not kill the grass and is easily changed as required.

Size of Arrow, 7 inches long. Finished in white.

GTA1—Tee Arrow, Each.....	\$0.50
---------------------------	--------

Porcelain Enameled Tee Arrow with the number of the hole, yardage and par. Arrow is of cast iron 15 inches long with bath tub enamel in gray with black figures.

In ordering enclose score card.

GTA2—Price, 9 pair.....	\$40.00
GTA2—Price, 18 pair.....	75.00

GTA2—Price, 18 pair.....	75.00
--------------------------	-------

### Miniature Arrows

These arrows are made of aluminum with red background. Numbers and raised edge aluminum color. Made in pairs of right and left numbered 1 to 18. Arrow is 5" long,  $\frac{3}{8}$ " thick.

Price, per pair.....	\$0.50
Price, per set of 18 pair.....	8.50

Price, per set of 18 pair.....	8.50
--------------------------------	------



## Caddy Badges



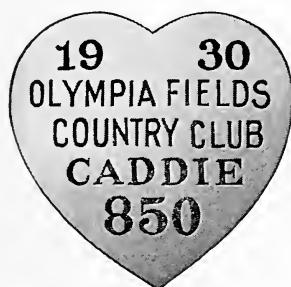
No. GC-129



No. GC-131



No. GC-120



No. GC-135



No. GC-132



No. GC-127



No. GC-122



No. GC-128



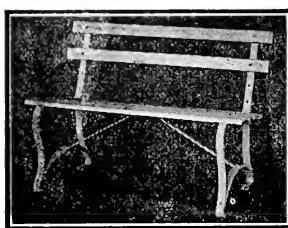
No. GC-125

Quantity	Nickel Plate	Brass	Quantity	Nickel Plate	Brass
12	\$ 8.00	\$ 7.00	100	\$19.35	\$16.20
25	9.00	7.65	200	36.00	30.60
50	12.15	9.00	300	50.40	41.40
75	16.35	12.60	500	72.00	59.40

MADE TO ORDER WITH NAME OF CLUB. SUBMIT SKETCH.

Additional Shapes and Individual Designs on Application.

### Tee Benches

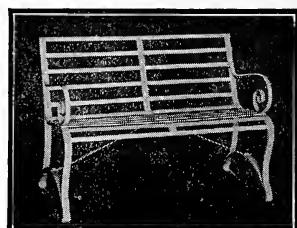


**The Autocrat.** A strong iron frame bench with wooden slats painted green. Made in three sizes.

GTB-4 foot ..... \$3.55  
 GTB-5 foot ..... 4.00  
 GTB-6 foot ..... 4.20

**The Estate.** An all-steel settee with arm rests. Made in 4 and 5 foot sizes.

F. o. b. Chicago.



GTB-1—4 foot ..... \$5.00

GTB-2—5 foot ..... \$5.60



### Original California Benches

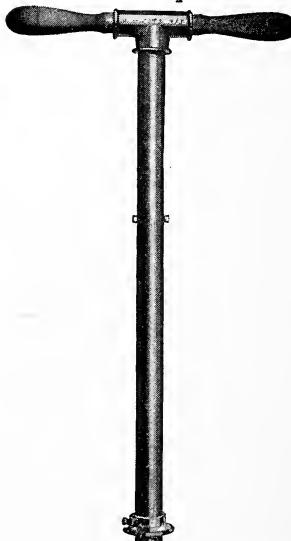
The concrete ends are exactly uniform in size, appearance and relatively great strength. They are light in color, smooth and all corners and edges neatly rounded. They are thoroughly reinforced with a steel frame.

The wooden parts in this bench are made from clear California redwood.

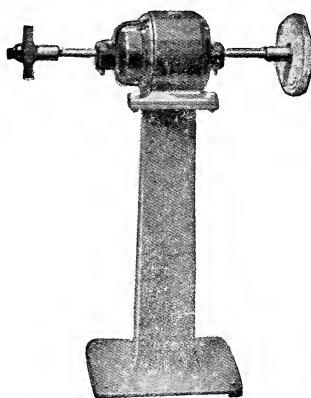
**CRATING CHARGE \$1.50 PER BENCH  
EXTRA FOR FREIGHT SHIPMENTS**

Length, 5 feet over all ..... \$12.50  
 Length, 6 feet over all ..... 13.75  
 Length, 7 feet over all ..... 15.00

### Sod Transplanter



### Electric Polisher and Buffer



For cleaning and polishing clubs. The best tool of its kind we know of. Comes complete with stand, motor, 2 buffer wheels and Tripoli. Extra attachments may be obtained.

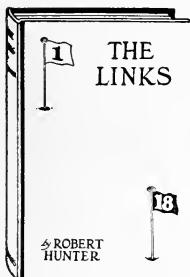
**GEP1—Price, complete ..... \$97.00  
F. o. b. Chicago.**

This tool is especially adapted to transplanting creeping bent on your greens or fairways. It can also be used for removing large weeds, ant hills, etc., replacing them with good sod. It will remove 50 plugs a minute.

**GST1—Price ..... \$15.00**

# GOLF BOOKS

## THE LINKS—By Robert Hunter.



This is one of the latest contributions to Golf Architecture and contains numerous ideas on the layout and construction of Golf Courses.

THE LINKS has 163 pages with 48 pages of illustrations showing some of the outstanding Golf Architecture of world famous Courses. Price, each.....\$4.00

## GOLF ARCHITECTURE IN AMERICA

By George C. Thomas, Jr.

This is another late book on the layout and construction of Golf Courses and contains many illustrations and layout plans of the foremost courses in the Old Country and in America. 342 pages.

Price, each.....\$5.00

## TURF FOR GOLF COURSE—By C. B. Piper and R. A. Oakley.

Is one of the best, a book dealing with the care and maintenance of Golf Course published at present time.

TURF FOR GOLF COURSES goes into the details of various turf seeds and their care as well as other maintenance problems. 262 pages.

Price, each.....\$2.50

## GOLF COURSE COMMONSENSE—By G. A. Farley.

Fully detailed instructions on planting and care of turf and trees—twenty chapters—256 pages—bound in buckram.

Price, each.....\$4.00

## LAWNS—By F. F. Rockwell.

Tells what is necessary to start a lawn right and keep it in vigorous growing condition. How to lay out the lawn, grade, fertilize, plant and care after planting, control weeds, and pests, and remake and repair old lawns—87 pages—39 illustrations.

Price, each.....\$1.00

## THE CARE OF ORNAMENTAL TREES—By C. F. Greeves-Carpenter.

All the operations in tree care, precautions necessary in transplanting, best time and method for pruning, how soil, age and kind of tree affects choice and application of plant food. 70 pages, 7 illustrations.

Price, each.....\$1.25

## MANUAL OF TREE DISEASES—By W. H. Rankin.

Separate chapters for each tree family. Diseases arranged according to part of tree affected, leaf, twig, branch trunk and root. Symptoms, cause and control stated clearly for each disease. 418 pages 70 illustrations.

Price, each.....\$3.25

## MANUAL OF TREE AND SHRUB INSECTS—By E. P. Felt.

Insects attacking all trees grouped according to method of attack. Separate key to each group of trees. Identifies insect by appearance and damage and refers to page where it is illustrated and all life stages described. Prevention and control methods. 408 pages, 256 illustrations.

Price, each.....\$3.50

# INDEX

## A

### Page

Adco	7
Ammo Phos	6
Ammonia Sulphate	6
Ant Exterminator	7-8
Ant Olio	8
Antrol Ant Syrup	7
Armour's (10-8-6)	6
Arrows, Tee	43-51
Arsenate of Lead	11
Automatic Valves	36-37
Auto Snow Plows	19

## B

Bacterial Food (Adco)	7
Badges, Caddie	53
Bag Rack	42-43-46
Ball Cleaners	46
Ball Rack	51
Ball Washers	46
Bamboo Poles	47-48
Bamboo Rakes	39
Ban	46
B. B. Trimmers	28
Bean Sprayers	16
Benches	54
Bent Grass	4
Bent Stolon Cutters	14
Bird Houses	40
Black Diamond Traps	19
Books	55
Boots, Horse	19
Broadcast Seeder	18
Brown Patch	
Preventives	10-11
Buckner Sprinklers	35-36
Buckner Swivels	37
Buckner Valves	36-37
Buifer	54
Bulldog Hose	38
Bushel Weights	3

## C

Caddie Badges	53
California Benches	54
Calo-Clor	11
Calogreen	11
Calomel	11
Carts	33-38
Chain Harrows	24
Characteristics of Grass	3
Charcoal	6
Chickweed Killers	8-11
Cocoa Tee Mats	50
Complete Fertilizer, 12-6-4	6
Compost Mixer	14
Converse Soil Screeners	14
Couplers	36-37-39
Cretting Bent	4
Crescent Rakes	39
Cup Extractors	45
Cup, Hole	45-48
Cutter, Hole	47
Cutters, Sod	41
Cyanogas	8

## D

Detroit Rough Mower	29
Diamond Spikes	19
Dip Nets	50
Discing Machines	22-24
Disinfectants	10
Distance Markers, 42-43-44-47-49	
Divot Cutters	48
Do-and-Don't Signs	44
Dolco Diworma	6

Dodge Weed Killer	9
Double Rotary Sprinkler	38
Drag	23
Dump Cart	33

## E

Early Bird Worm Rake	40
Eclipse Mower	28
Edger	28-39-41
Employment	3
Entrance Signs	43
Eureka Sprayer	16
Evergreen Insecticide	8
Exterminators	5-8-9-11
Extractors, Hole Rim	43

## F

Fairway Markers	43-44
Fairway Mixture	4
Fertilizers	5-6
Fertilizer Spreaders	12-13-14
Fertiluvia	7
Flags	42-47-49
Flag Poles	45-47-48
Flag Swivels	48-49
Flaring Rose Sprinklers	37
Flex Mat Drags	23
Fordson Tractors	30
Fordson Wheels	30
Fuller Lawn Broom	39
Fungicides	5

## G

Gang Mowers	31
Gang Rollers	20-21
Germination	3
Golf Ball Washer	46
Golf Hose	38
Golf Hose Cart	38
Golf King Sprinklers	35-36
Golf King Super Valves	36
Golf Mixtures	4
Golf Tractors	30
Golf Turf Edgers	39
Grass Culture	2
Grass Cutters	26-27-28-29-31
Green Mower	26
Green Rollers	19-20-22-23
Greens Flags	42-47
Grub Killers	9-11

## H

Hand Carts	33
Hand Sod Cutter	41
Hardinge Sharpeners	32
Harrow	24
Hawkes Ferti Spreader	14
Heart Markers	47
Herbicide	9
Hoffman Spreaders	13
Hole Cutters	47
Hole Markers	42-43-47-49-50
Hole Rims	45-48
Horse Lawn Boots	19
Horner Spikes	19
Hose	38
Hose Carts	38
Hose Couplings	37-38
Hose Swivels	37
Hudson All-Purpose Rake	40
Hudson Sprayers	17
Humus	7

## I

Ideal Sprayer	17
Insecticides	5

## J

Johnson Ball Rack	51
Johnson Dumb Cart	33
Johnson Motor Scythe	29
Johnson Tee Arrows	51
J.O.J. Sod Cutter	41
J.O.J. Tees	52

## K

Kemip Soil Shredder	15
Kenny Soil Testing Set	18

## L

La Motte Soil Testing Set	18
Lark Sprinkler	34
Lawn Boots, Horse	19
Lawn Broom	39
Lawn Hose	38
Lawn Mowers	26-27-28-31
Lawn Mower Sharpeners	32
Lawn Sprinklers	34-35
Lawn Rollers	20-21-22
Lawn Sweepers	25
Lead Arsenate	11
Leaf Racks	33
Lewis Ball Washers	46
Lifter, Sod	39
Little Wonder Sprinkler	38
Loma	6

## M

Markers, Green	42-43-44-47-49-50
Martin House	40
Master Distributors	12
Mats Tee	50
MacGregor's Ant Food	7
Meeker Cultivators	24
Meeker Harrows	24
Mercuricls	10-11
Meyer Snow Plow	19
Milorganite	3-6
Mobo Soap	46
Mole Trap	40
Morgan Soil Testing Set	18
Motor Scythe	29
Mower	26-27-28-29-31
Mower Sharpeners	32
Mowrah Meal	8

## N

National Mowers	31
Nets, Dip	50
Nu Green	10
Number Seeds per lb.	3
Nursery Volek	11
Nozzle	38

## O

Ole Olson Rake	39
----------------	----

# INDEX — (Continued)

## P

	Page
Parking Signs .....	44
Peat Moss .....	7
Peerless Sharpeners .....	32
Pennsylvania Lawn Mowers..	26
Pennsylvania Lawn Sweepers	25
Perfection Sprayers .....	17
Perfection Sprinklers .....	34
Philadelphia Mowers .....	27
Phosphate of Ammonia .....	6
Pines Sod Edgers .....	41
Polishers .....	54
Pop-Up Sprinklers .....	35
Practice Green Markers....	42-47
Putting Green Cultivators ..	23
Putting Green Mixture .....	4
Putting Green Mowers .....	26
Putting Green Rollers, 20-21-22	22

## R

Rakes .....	39
Red Cap Equipment .....	11
Rhode Island Bent .....	4
Rim, Hole .....	45-48
Road Scrapers .....	41
Rollers .....	20-21-22-23
Roller Mowers .....	26
Roller Sprinkler .....	35
Rotary Sprinkler .....	34-35-36-38
Rough Mower .....	28-29
Royer Compost Mixer .....	14
Rubber Tees .....	51

## S

Salem Distributor .....	13
Sand Trap Rake .....	40
Scotch Chain Harrow .....	24
Scraper, Road .....	41
Screeners .....	14-15
Scythes .....	29
Seaside Bent .....	4
Seeders .....	12-18
Seed Mixtures .....	4
Seeds .....	4
Seeds, per lb. ....	3
Shredders .....	14-15
Signs .....	42-43-44-50
Smoothing Harrow .....	24

## Page

Snow Mould Control .....	10
Snow Plow .....	19
Soap, Mobo .....	46
Sod Cutter .....	41
Sod Edger .....	41
Sod Lifter .....	39
Sod Tamper .....	39
Sod Transplanter .....	54
Soil Shredder .....	14-15
Soil Testing Sets .....	18
Special Turf Fertilizer .....	6
Spike Disc .....	22
Spike Rollers .....	22-23
Spikes .....	19
Spromo Peat .....	7
Sprayer .....	16-17-34
Spray Oil .....	8
Sprucadars, Fertilizer .....	12-13-14
Springfield Lawn Sweeper ..	25
Sprinklers .....	16-34-35-38
Spuds .....	19
Standard Flags .....	42
Staude Tractors .....	30
Stolon Cutter .....	14
Stolon Sprayers .....	38
Sulphate of Ammonia .....	6
Sunoco Spray Oil .....	8
Swift's 12-6-4 .....	6
Sweepers .....	25
Swivels .....	37-49

## T

Taboo Red Cap Equipment..	11
Tampers .....	39
Targets .....	19
Tees .....	52
Tee Arrows .....	43-51
Tee Balls .....	52
Tee Holders .....	52
Tee Markers .....	43-50
Tee Mats .....	50
Tee Stands .....	48
Tee Towels .....	50
Thomas Rough Mowers .....	28
Thompson Seeders .....	18
Thompson Spreaders .....	12
Thompson Swiftway Sweepers .....	25
Tobacco Dust .....	6
Tom Bendelow Cultivators...	23
Top Dressing Drag .....	23

## Page

Towels .....	50
Tractors .....	30
Tractor Mowers .....	31
Tractor Rollers .....	21
Tractor Spikes .....	19
Traps .....	40
Trap, Mole .....	40
Trap Rakes .....	40
Trimmers .....	28-39
Turf Edger .....	41
Turf Repairer .....	39
Turf Special Fertilizer .....	6

## U

Undercut Trimmers .....	28
Underground Systems .....	35-36
Universal Sharpeners .....	32
Urea .....	6

## V

Valves .....	36-37
Volck .....	11

## W

Waste Receptacles .....	17
Water Ballast Rollers .....	20
Weed Killer .....	8-9
Weed Stingers .....	52
Weights per bu. ....	3
Wheel Barrows .....	33
Wheel Barrow Seeders .....	18
Wheel Carts .....	33
Wheel Spikes .....	19
Wheels, Wide .....	30
Whipping Poles .....	48
Winner Swivels .....	48
Wood Rakes .....	39
Wood Tees .....	52
Worm Eradicators .....	9-11
Worm Rakes .....	40

## Y

Yardage Markers .....	42-43-44
-----------------------	----------

J. OLIVER JOHNSON, Inc.  
Complete Golf Course Equipment

**SEED SPECIALISTS**

940-960 W. HURON STREET  
CHICAGO, ILL.